

EMPOWERING CREATIVITY:  
HOW AI IS ENHANCING THE MARKETERS?

SPOTLIGHT

REIMAGINING FINANCE AND ACCOUNTING  
WITH GENERATIVE AI

# TRADEFLOCK

## BIG TAKE

SIGNIFICANCE OF DATA  
ANALYTICS IN THE IoT  
ECOSYSTEM

SELF-DRIVING CARS  
AND THE EXPANSION  
OF AUTOMOTIVE  
VALUE CHAIN

**Ganna Vadlamaani**  
President & CEO - Growth Markets,  
Amzur Technologies

10 BEST LEADERS FROM



IN INDIA 2023

Vol 17 • Issue 15-31 • July 2023



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# DECODING THE AI REVOLUTION

**A**I is reshaping industries and revolutionising the way we live and work. Its transformative power has captured the attention of investors worldwide, with global AI investments reaching an astounding \$98 billion in 2022. This staggering figure highlights the immense confidence and growing interest in AI's potential to drive innovation and fuel economic growth.

At the forefront of this AI revolution are industry powerhouses like Google, Microsoft, and Amazon. These tech giants have demonstrated an unwavering commitment to AI research and development, pushing the boundaries of what's possible. Google's DeepMind, for instance, has achieved remarkable breakthroughs in deep learning and reinforcement learning, propelling AI to new heights. Microsoft's Azure Cognitive Services and Amazon's AWS AI Services have democratised AI by providing accessible tools and platforms that empower developers and businesses around the globe. But the AI landscape isn't solely dominated by industry giants. Disruptive start-up innovators are making their mark, challenging the status quo with audacious ideas and groundbreaking solutions.

Beyond technological advancements, ethical considerations are paramount in shaping the future of AI. Organisations like the Partnership on AI, a collaboration of major tech companies, nonprofits, and academia, are actively advocating for responsible AI deployment. They work towards developing guidelines and frameworks that ensure AI remains transparent, fair, and inclusive. By prioritising ethics, AI leaders are aiming to build trust and address concerns surrounding bias, privacy, and the ethical implications of AI technology.

India, with its burgeoning technology sector, has emerged as a significant player in the global AI landscape. The Indian government has unveiled a comprehensive National AI Strategy, focused on research, development, and skilling initiatives to bolster the country's AI capabilities. Indian companies like Infosys, Wipro, and TCS are driving AI-driven solutions and contributing to the country's growth as a prominent player in the AI industry.

This AI revolution is driven by leaders who are not only shaping the trajectory of the field but also hold the key to tackling societal challenges and unlocking AI's full potential. Collaboration, partnerships, and investments in R&D are crucial to harnessing AI's power for the greater good. These leaders are nurturing a robust ecosystem of innovation and ensuring ethical practises. This will help us collectively navigate the complex AI landscape and build a future where AI benefits all of humanity.

In our current edition of TradeFlock's '10 Best Leaders from AI in India 2023', we bring their insights and achievements that provide invaluable lessons and inspiration for navigating the evolving AI landscape. Together, let us embrace the rise of AI leaders and witness the profound impact they will continue to make on our world.



*Anamika*  
**Anamika Sahu**

Consulting Editor-in-Chief

✉ [anamika@tradeflock.com](mailto:anamika@tradeflock.com)

# UPCOMING ISSUES

## 10 Most Inspiring CIOs In India 2023

## 10 Best CXOs In India 2023

## 10 Best Corporate Leaders In India 2023

## 10 Best CSOs In India 2023

## 10 Best COOs In India 2023

# TRADEFLOCK

JOURNEY OF LEADERS

Vol 17 • Issue 15-31 • July 2023

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— LIST OF —

# 10 BEST LEADERS FROM AI IN INDIA 2023

| NAME                  | DESIGNATION   | COMPANY                     |
|-----------------------|---|-----------------------------|
| Dr. AngShuMan Ghosh   | Founder & CEO   | Menrva Technologies         |
| Ashok Ramachandran    | Director  | AUK Computing               |
| Dinesh Jhakar         | Head - Robotics & Simulation  | Chropynska India            |
| Ganna Vadlamaanani    | President & CEO - Growth Markets  | Amzur Technologies          |
| Naushath Mohammed     | Senior Director   | Sutherland                  |
| Prashant Kaul         | Regional Sales Director   | Corsight AI                 |
| Sahil Makkar          | Director - AI   | Happiest Minds Technologies |
| Satyajit Dwivedi      | Regional Director, EMEAP, Energy & Utilities, Manufacturing & Public Sector | SAS                         |
| Sudhakar Rao          | Head, Asia Pacific Japan, GSI Partners                                      | UiPath                      |
| Venkatesh Pagidimarri | Co-Founder & Chief AI Officer   | Foundation AI               |

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**Satyajit Dwivedi**  
Regional Director, EMEAP,  
Energy & Utilities, Manufacturing  
& Public Sector, **SAS**



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*Empowering Businesses for Tomorrow's Tech-Driven World*

# GANNA VADLAMANI

*President & CEO - Growth Markets, Amzur Technologies*

In today's constantly evolving digital landscape and amidst ever-changing market demands, small and mid-market companies find themselves at the forefront of a dynamic and competitive business environment. As they strive to stay relevant and thrive in the digital era, they encounter a myriad of challenges that demand their attention and strategic prowess.

The pressing need for digital transformation tops the list. In an increasingly interconnected world, businesses are compelled to adapt and embrace digital technologies to remain agile, innovative, and customer-centric. For SMBs and Mid-market companies, this transformation can be both daunting and crucial for their long-term survival.



Cyber security follows digital transformation as the second most critical concern. With the rapid digitisation of business processes, the risk of cyber threats and data breaches has escalated significantly. For smaller companies with limited resources, safeguarding sensitive information and ensuring data integrity become complex endeavours. Moreover, regulatory compliance poses yet another hurdle. The ever-changing landscape of laws and regulations necessitates vigilant adherence to industry standards and government mandates. Ensuring compliance can be time-consuming and resource-intensive, especially for companies with smaller operational capacities.

In this demanding landscape where the world pivots towards AI and Hyper Automation, Ganna Vadlanaani, an alumnus of Harvard Business School, with decades of unparalleled industry experience, emerges as an industry leader for SMBs and Mid-market companies. His visionary leadership at Amzur Technologies empowers these businesses to navigate the intricacies of the digital landscape with confidence and dexterity. By providing cutting-edge solutions in hyper-automation, application modernisation, and low-code platforms, Ganna equips his clients with the tools to embark on seamless digital transformations. By harnessing the potential of emerging technologies like AI, RPA and Low-code platforms, businesses can streamline operations, boost efficiency, and elevate their competitiveness in the market.

Recognising the paramount importance of Cyber security, Ganna ensures that Amzur Technologies places the utmost emphasis on security in every solution. By implementing robust measures and staying vigilant against cyber threats, he ensures that clients' valuable data remains safeguarded, mitigating potential risks and vulnerabilities. Amzur, under Ganna's strategic guidance, also takes on the responsibility of guiding clients through the intricate maze of regulatory compliance.

In our exclusive interview with Ganna, we delve deeper into his profound impact on the industry and explore how his unparalleled industry expertise positions Amzur as an invaluable partner for small and mid-market companies.



### **What challenges do SMB & Mid-market companies face now and in the future? How does Amzur Technologies align with these challenges in its vision?**

As an IT leader, I see SMB & mid-market companies facing multiple challenges today and, in the future, including digital transformation, Cyber security, scalability, access to advanced technologies, and regulatory compliance. At Amzur, we align with this vision by working closely with companies in these segments to help them thrive in the digital era.

Our approach involves providing expertise in hyper automation and application modernisation. We provide comprehensive managed services through our proprietary Unified Ops Framework, which underscores the importance of process optimisation, data management, AI integration, and rigorous security framework, thereby promoting end-to-end digital transformation. With the strategic use of advanced technologies, such as AI, RPA, and low-code platforms, we deliver on the promise of automation to boost efficiency, and reduce errors for SMBs and mid-market companies, enabling them to expand at scale. By taking over the technological complexities via our managed services, we enable companies to focus on their core business areas.

Security is paramount in our solutions, ensuring data protection and regulatory compliance. We guide our clients through the digital landscape, establishing a robust online presence and making effective use of digital platforms. Our vision is to be a trusted partner, providing the necessary tools, expertise, and support for overcoming challenges, achieving business goals, and positioning for superior returns.



### **What strategies have you implemented to position Amzur among the top IT transformation players in the industry?**

At Amzur Technologies, our strategy to become a top Business & Technology transformation player includes investing and innovating on key technologies like AI, RPA, and low-code platforms. We deepen our industry expertise to tailor solutions for unique needs, foster collaborations with tech companies and research institutions, and invest in hiring and training top talent. Our customer-centric approach puts clients at the core, and we

continuously improve our processes to stay ahead. These strategies position us as leaders in Business & Technology transformation, ready to help clients navigate the digital era's challenges and opportunities.

### **Who are your biggest influencers in life?**

It is not who, but what. During my formative years, I have always been fascinated with “Scopes”. Two profound influences significantly shaped my perspective on life: a Telescope and a Microscope. Introduced to me by my parents and teachers, these instruments have left a lasting impact on my approach to the world. The Telescope, with its vast exploration of the universe, taught me to think big and envision far-reaching possibilities, fostering curiosity, ambition, and a constant pursuit of growth.

On the other hand, the Microscope's focus on minutiae honed my attention to detail, nurturing an analytical mindset and the ability to discern intricate patterns and connections. Balancing these macro and micro perspectives has been instrumental in my decision-making process, enabling me to dream big yet stay grounded, strategise while paying attention to details, and make visionary yet pragmatic choices.

### **How do emerging technologies like AI impact economies and global markets?**

AI, or Artificial Intelligence, is set to revolutionise economies and markets worldwide, reshaping industries and transforming our way of life. Its ability to analyse vast amounts of data, make predictions, and automate complex tasks is driving remarkable efficiency and productivity gains in the near and mid-term. This empowers businesses to optimise operations, make data-driven decisions, and create innovative products and services, fostering increased competitiveness and growth.

On a macroeconomic scale, AI has the potential to significantly boost economic growth by freeing human capital for more creative tasks and generating new industries and jobs. However, challenges such as job displacement, data privacy, and ethical concerns must be addressed through strategic policies and collaboration between governments and businesses.

AI is a pivotal force for the future of economic growth and societal transformation, having profound and far-reaching impacts on global economies and markets.

### **How did you build strong professional relationships and high-performing teams, and how did this contribute to your success?**

Building successful professional relationships and high-performing teams has been integral to my success as an industry leader. It begins with trust, mutual respect, and openness, which have paved the way for new opportunities. Emphasising collaboration has led to innovative solutions and goal achievement. Prioritising the growth and well-being of my team through professional development and constructive feedback has fostered motivation and high performance.

Leading by example with qualities like integrity and commitment has earned respect and created a positive work environment. Embracing diversity and continuous learning have enriched my relationships and adaptability in the ever-changing business landscape. Investing in people and relationships is fundamental to sustained success not just in IT but any industry.

### **Can you elaborate on your expertise in low code platforms, hyper-automation, and lean Six Sigma and how you've applied these skills in your previous roles?**

My expertise in low-code platforms, hyper-automation, and Lean Six Sigma has been crucial in driving operational efficiency and accelerating digital transformation. At Amzur, we prioritise configuration-driven applications with low-code platforms, enabling rapid software development while minimising reliance on traditional coding. This approach has yielded significant value for our clients, allowing them to swiftly introduce new features, products, and services. For instance, one of our financial sector clients streamlined their customer onboarding process using our low code solutions, reducing the time from days to just hours, resulting in improved customer satisfaction and operational efficiency.


Moreover, I've spearheaded hyper-automation initiatives at Amzur and Hewlett Packard Enterprise, implementing advanced technologies like RPA and Applied AI. We consolidated fragmented RPA and Automation product lines into a cohesive portfolio, establishing a next-gen RPA automation and Applied AI architecture. This transformation significantly enhanced process efficiency and allowed for faster, data-driven decision-making.

Additionally, my expertise in Lean Six Sigma principles has helped streamline processes, improve quality, and reduce waste in various organisations. For instance, at HPE and ANZ Banking Group, I applied Lean Six Sigma methodologies to re-engineer business processes, leading to a decrease in the total cost of ownership of systems by over 40% and a significant increase in productivity.

 **How did your role as WW Executive Director at HPE in Applied AI shape your expertise and leadership in the technology industry?**

As the Worldwide Executive Director at HPE in RPA & Applied AI, I honed my expertise and leadership in the tech industry in several ways: I immersed myself in Applied AI and RPA, gaining a comprehensive understanding of these technologies. I set the strategic direction for HPE's RPA & Automation lines, aligning technology initiatives with business objectives, resulting in reduced costs and increased margins. I managed a global team, driving efficiency and increasing revenue. Leading a diverse team taught me valuable lessons about fostering innovation and driving performance through people.


Additionally, I focused on driving innovation by building next-gen platforms and emphasising their importance for maintaining a competitive edge. Overall, these experiences have significantly contributed to my success in the industry, delivering accelerated business value and superior returns to our clients.

 **How has your diverse experience shaped your leadership style and ability to drive successful transformations and deliver high-impact programmes?**

With extensive global experience, I've honed a leadership style that emphasises adaptability, strategic thinking, collaboration, resilience, and a focus on people. Working across diverse industries and countries has taught me to quickly adjust to new environments and lead diverse teams through successful transformations. I align technology initiatives with business objectives, anticipate trends, and make strategic decisions for long-term success.

Emphasising collaboration and a people-centric approach, I foster an environment where everyone feels valued, contributing to achieving a

shared vision. Resilience in the face of challenges enables me to drive transformations even in adversity. I prioritise investing in teams, building strong relationships, and fostering a culture of continuous improvement. My results-oriented approach sets clear goals and holds myself and my teams accountable for delivering on commitments. In summary, my leadership style drives successful transformations and high-impact programmes, positioning organisations for sustained growth and excellence.

 **How do you ensure workforce adaptability and upskilling for a technology-driven future with the rising reliance on AI and automation?**

In our ever-evolving technological landscape, staying ahead requires a workforce that embraces change with confidence and is armed with the right skills to conquer the challenges of a technology-driven future. At our organisation, we approach this imperative with a multi-faceted strategy. We foster a culture of continuous learning, offering regular training and development opportunities to empower our employees with knowledge about cutting-edge technologies and skill upgrades.

Encouraging a growth mindset is another essential aspect, inspiring our teams to view challenges as stepping stones to learning and personal growth, thus facilitating quicker adaptation to innovations. Collaborating across functions is also vital, enabling our employees to grasp how technology can elevate operations and adapt seamlessly to emerging tools. Our leadership plays a pivotal role in driving technology adoption, leading by example to assuage any fears or resistance among our workforce.

Clear communication is key, as we regularly update our teams about the why, how, and impact of technology adoption, ensuring they feel supported throughout the transition. We believe in the power of employee involvement, engaging them in the decision-making process when it comes to implementing new technologies and fostering a sense of ownership and enthusiasm. Lastly, we guide our employees through career pathing and skill mapping, providing a roadmap for how roles may evolve with new technologies and what skills will be essential for future success. By diligently implementing these strategies, we are confident that our workforce will remain adaptable and well-equipped to embrace a bright future empowered by technology. ♦

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- ▶ NASDAQ 100 Index includes 100 of the largest non-financial companies listed in the US.
- ▶ With a market cap of \$18 Trillion, the index has grown ~6x over the last 10 years. <sup>1</sup>
- ▶ NASDAQ 100 has also outperformed S&P 500 in 11 of the last 13 years. <sup>2</sup>
- ▶ Many non-US companies such as Baidu (China), Atlassian (Australia), ASML holdings (Netherlands) are also part of the Index. <sup>3</sup>
- ▶ NASDAQ 100 constituents have grown the value of their patents by ~10x since May 2007 vs ~3.4x across all publicly-listed, tracked companies globally. <sup>4</sup>

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\*TER of 0.13% is for Direct Plan & is not permanent & subject to change from time to time, within the overall limit of 1%.

<sup>1</sup>Source: Bloomberg, 31st January 2022

<sup>2</sup>Source: indexes.nasdaqomx.com, February 2022

<sup>3</sup>Source: indexes.nasdaqomx.com, February 2022

<sup>4</sup>Source: indexes.nasdaqomx.com, February 2022

Mutual Fund investments are subject to market risks, read all scheme related documents carefully.



# AI REVOLUTION IN HEALTHCARE: PIONEERING THE FUTURE OF MEDICINE AND TRANSFORMING PATIENT CARE

According to a study by Accenture, AI adoption could lead to an estimated \$150 billion in annual savings for the pharmaceutical industry by 2025. AI enables drug discovery through predictive analytics, identifying potential candidates with higher success rates. This has resulted in a surge of AI-based drug development partnerships, with an expected CAGR of 52% from 2020 to 2027.

This showcases that in pharmaceutical manufacturing, AI-driven processes enhance drug development by significantly reducing time and cost.

The entire healthcare industry, as whole, undergoes a profound transformation due to AI. The global AI healthcare market is projected to reach \$45.2 billion by 2026, growing at a CAGR of 44.9% from 2021 to 2026. AI optimises hospital operations, supply chain management, and resource allocation, reducing costs and improving efficiency. Additionally, telemedicine and virtual health assistants driven by AI enable better patient engagement and access to healthcare services.

This demonstrates that the future of AI in healthcare is nothing short of awe-inspiring,

with remarkable innovations on the horizon that have the potential to revolutionise the entire industry. As technology advances at an unprecedented pace, AI is increasingly becoming a key player in medical advancements, ranging from personalised treatments to disease detection and diagnosis.

## Ethical Implications and Challenges of AI Adoption in Healthcare

The future of AI in healthcare holds great promise, but ethical considerations and challenges must be given equal attention. Protecting patient data's privacy and security is crucial to maintain trust in AI-driven healthcare solutions. Addressing bias in AI algorithms is essential to prevent perpetuating healthcare disparities and marginalising vulnerable populations. While AI can offer valuable insights, human healthcare professionals must retain ultimate responsibility for patient care. Job displacement concerns can be alleviated by viewing AI as a tool to enhance healthcare professionals' capabilities and implementing training programs for seamless integration. ♦



*Inspiring the AI Landscape*

# DR. ANGSHUMAN GHOSH

**Founder & CEO, Menrva Technologies**



In a world driven by data and powered by artificial intelligence, one name stands out as a true trailblazer—Dr. AngShuMan Ghosh. With a magnetic blend of visionary leadership, cutting-edge expertise, and an unyielding passion for innovation, Dr. AngShuMan has emerged as a driving force in the realms of data science, AI, and business.

From his humble beginnings as a software engineer at Wipro to his transformative roles at global giants like Disney, Sony, Target, and Grab, Dr. AngShuMan has left an indelible mark on the industry. His relentless pursuit of knowledge and academic achievements led him to secure a PhD from a premier Tier-1 institution. Throughout his illustrious career, Dr. AngShuMan has been recognised with a slew of prestigious awards, including 'Top 100 AI Leader Award,' '40 under 40 Global Innovator Award,' and 'LinkedIn Spotlight Award.' As a member of the exclusive Forbes Technology Council, he continues to shape the dialogue around technology's transformative potential.

Dr. AngShuMan's brainchild, Menrva Technologies (an innovative AI-ML company), came into life in 2023. A cutting-edge deep-tech company driven by the power of AI and Data Science, Menrva Technologies serves top global companies in diverse industries with its customised AI-ML products, best-in-class consulting services, and industry-relevant training and courses. Today, under his headship as its CEO, Dr. AngShuMan is

revolutionising how global organisations tackle critical business challenges. Today, through bespoke AI-ML solutions, elite training and personalised consulting, Menrva Technologies drives digital transformation for marquee clients, propelling them to unparalleled success. Dr. AngShuMan has published 1 book, 3 US patents, and 10+ research papers in reputed international journals and conferences. He has given 100+ lectures at top institutes and 20+ talks at international conferences in Asia, Europe, and America.

Join TradeFlock and Dr. AngShuMan on an extraordinary journey as he unlocks his journey, challenges, learnings, and more.



## **What major challenges did you face, and how did you come out strong from them?**

In my long professional career of more than 15 years, I faced many challenges, and I always learned something valuable while overcoming them. In my first job at Wipro, I was a software engineer, and I was very good at coding and have coded for Fortune 100 clients, but I failed to understand the business implications of the software. That is why I decided to join XLRI Jamshedpur. I was an MBA topper at XLRI and learned greatly about business at XLRI.

After my PhD, I joined Disney Star, where I worked for Hotstar. The volume of data at Disney and Hotstar was huge and required new methods to make sense of it. I took the

challenge and learned big data analytics and machine learning, which I then successfully applied to data science projects at Disney, Target, and Grab. The use of big data and data science helped me contribute multi-million-dollar additional revenues for my employers.

I have worked for companies from varied geographies: Disney and Target are from America; Grab is from Singapore; Sony is from Japan; and Sayurbox is from Indonesia. Initially, I found it challenging to work with non-Indian people due to differences in culture and working style. I studied a lot about different cultures and leadership styles. I also actively observed, listened, and tried to adapt to my non-Indian colleagues over many years. Finally, I was able to understand and appreciate the differences between different cultures and leadership styles.



**Could you provide specific examples of how AI has transformed the customer experience and contributed to personalised recommendations or improved services in your organisation?**

I have been able to use AI and data science to drive innovation and provide improved, personalised customer experiences for my organisations.

At Grab, I created customer churn models to predict in advance which customers have a higher likelihood of churning. I also created the Affluence Index, to compute the value of each of our 100 million+ customers using 10 different statistical parameters. These models transformed our digital marketing and customer relationship management by personalising communications, promotions, and ads for each customer.

At Sony, my team and I developed state-of-the-art recommendation systems to provide personalised content recommendations for SonyLIV, the second largest OTT platform in India with 200 million+ users. We published three US patents and multiple research papers based on our research work in the areas of recommendation systems and machine learning.

At Sayurbox, my team developed cutting-edge AI-ML products for recommendations, search, and forecasting and successfully implemented them to provide personalised and contextualised services to millions of

customers in Indonesia. We contributed to 12 million in annualised revenues for the company using our AI-ML products.



**What are the key learnings you carry from the past that you are implementing today in your role and responsibilities?**

There are three key learnings that I carry with me: focus on the impact; culture eats strategy for breakfast; and be resilient and anti-fragile.

When immersed in the business realm, the ultimate measure of success lies in the impact we create. It's not merely about tools and technology; it's about solving critical business problems and driving substantial results that shape the company's growth and success.

Remember, culture trumps strategy.

Understanding and embracing diverse cultures, fostering an inclusive work environment, and nurturing core values like integrity, innovation, and commitment are the pillars that lay the foundation for a thriving organisation.

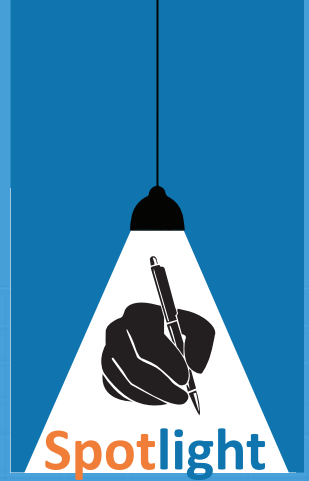
Life's challenges are inevitable, but our response defines our destiny. Embrace setbacks, learn from mistakes, and let resilience guide your journey. By growing stronger with each hurdle and refusing to repeat past errors, you'll forge a path to enduring triumph.



**How are you preparing yourself for an AI-centric world? What plans do you have for personal and professional development in the coming years?**

AI is evolving at a very fast pace. A few years ago, AI was good only with numeric data. But in the last few years, AI has made immense progress with unstructured data such as text, images, and videos. Advances in NLP and computer vision amazed us. And right now, generative AI is creating waves across the world. AI in particular and technology in general are evolving very fast, and we need to constantly upgrade ourselves to stay relevant.

I try to spend a few hours every day reading and learning about the latest developments in the field of AI. I also regularly take some courses from online education platforms such as Coursera or EdX to upgrade my knowledge. In my work, I constantly try to improve existing AI models and work with my team to find better ways of doing things. ◆◆



# CHANGING THE WEATHER FORECASTING GAME WITH AI

Over the years, the weather forecast in India has changed. A natural disaster like the Kedarnath flood gives an alarming sign about switching to advanced technology like AI. In order to save the lives of millions, the government looks towards advanced forecasting models to accurately predict the changes in weather. The Indian Meteorological Department includes technical advancements, including AI, Machine Learning, and digital base forecasting to enhance the accuracy of weather forecasting. However, it is undeniable that an advanced high-quality chunk of data is required to

integrate AI with weather forecasting to transform the results.

As per the Artificial Intelligence + report, applying an AI-driven conventional model can forecast the rainfall and weather conditions more accurately within a few hours by using advanced numerical forecast models. With climatic changes and severe weather events like the recent cyclone, Biparjoy, increases the need for accurate weather forecasting to let people and government prepare in advance.

According to the data of Statista, the weather forecasting market in India is projected to



show a CAGR of 15.72% from 2022-27. The projected market volume of weather forecasting in India will be \$21.95 by the end of 2027. The next few years of Indian weather forecasting will largely depend on how the Indian Meteorological Department utilises advanced AI to develop accurate weather forecasting for the next few months.

In an interview, Mrutyunjay Mahopatra, Director General of the Meteorological Department Of India, said that *"The expectations from the general public and various stakeholders have increased manifold, today people want more and more location-specific information, more accurate information and information that is catered to their very specific requirements."*

To test and analyse the preciseness of AI in weather forecasting, a team of researchers conducted a research. During this, the researchers of the State Pennsylvania State University collaborated with a team of meteorologists to analyse the 50,000 satellite images to identify the storms quickly. During this, they found the comma-shaped clouds formation, which they predicted as a sign of trailblazers, thunderstorms, and high winds.

In the next session, they analysed the same using AI and machine learning to automatically detect these clouds in less than a minute with almost 100% accuracy. At the end of this study, researchers found that AI tools simply refocus the meteorologist's attention on the potential cloud formation, predict almost 64 percent of severe weather events, and beat traditional weather forecasting systems.

### India's Effort to Use AI for Weather Forecasting

The Indian Meteorological Department makes consistent efforts to bring accuracy to weather forecasting leveraging AI. The entry of private players like Skymet allows better contextual analysis of the forecasting data. Apart from this, a group of scientists from the Indian Meteorological Department has enrolled in an AI research group. These scientists have an AI/ML and computer science background. In addition, the Indian Government also partnered with IBM to develop advanced AI tools for accurate weather forecasting. In the future, Indian weather forecasting will be more precise and will make it easier for different industry players to a large extent.

### Google's AI Can be Game Changer in Accurate Weather Prediction

India's large population uses smartphones to check the weather for the week. In the coming years, various private weather forecasting tools will also play a significant role in bringing accuracy. In Inverse's report, Google researchers claim that they developed an AI system that can predict weather patterns and forecasting with more accuracy. With Google's AI, it will be much easier for common people to get the weather forecasting data on remote devices.

The company writes in a detailed research report, "We use a data-driven physics-free approach, meaning that the neural network will learn to approximate atmospheric physics from the training examples alone, not by incorporating a prior knowledge of how the atmosphere actually works."

It will benefit people to easily navigate the weather for the next week and plan accordingly. In the coming years, Google's AI system, which is used by 55% of people in India, will improve the end results and notify people about thunderstorms, heavy winds, and cyclones in advance.

### Future Of Weather Forecasting In India

The focus of the Indian Government currently is to leverage the evolving AI to directly benefit agriculture and improve weather forecasting in the coming years. For this, the Ministry of Agriculture and Farmers Welfare has partnered with a private company to deploy AI-weather forecasting tools to predict the rainy season during the Kharif season accurately. According to data shared by the government on the IndiaAI website, it partnered with IBM and other private AI players to run its various initiatives to help agriculture and other sectors.

The predicted future of Indian weather forecasting depends on the future initiatives of the company and upcoming AI models. It is interesting to see how the Indian Meteorological Department will leverage machine learning to bring accuracy to its weather forecasting. Besides this, India should also focus on developing its AI-based weather forecasting tools and bringing new leaders forward to join this revolutionary change. ♦♦



*Unleashing AI's Potential and Transforming Industries*

# ASHOK RAMACHANDRAN

*Director,*  
**AUK Computing**



Every experience counts, and for Ashok Ramachandran, his journey from a sales manager to now leading AUK Computing has been a challenging one. A seasoned professional with extensive experience in the IT industry, Ashok has been the Director of AUK Computing, a company that consults and builds bespoke servers, workstations, and storage solutions, since February 2019. He has been instrumental in leading the company to success in India's AI landscape.

Ashok has served as the Country Head at ProLabs.com and as the Head of Sales at Boston Limited, accruing over eight years of industry experience. His expertise extends to his tenure as a Business Development Manager at BOXX Technologies and as an Assistant Consultant at Tata Consultancy Services. With a proven track record in sales management, Ashok has excelled as a Sales Manager at Peremex Pvt. Ltd. and has consistently demonstrated the ability to drive growth and deliver results.


TradeFlock discussed with Ashok about his roles and responsibilities and how

he leverages his experience to put AUK Computing at the forefront of delivering leading-edge technologies.



**Before becoming the Director of AUK Computing, what roles did you work in, and how did they influence your leadership style?**

Throughout my professional journey, I have had the opportunity to work across diverse roles such as sales, marketing, and management before assuming the leadership role at AUK Computing. Each of these experiences has given me invaluable insights into the business world and taught me the nuances of running a successful enterprise. The skills and knowledge I gained from these frontline positions have helped shape my leadership style, which emphasises perseverance, conviction, and a clear vision. Working with organisations that foster growth has allowed me to pursue my passion and make thoughtful decisions. The success we have achieved at AUK Computing is a testament to it.

 **How do you ensure that your company stays updated with the latest advancements in server and storage technologies and maintains a competitive edge?**

Our focus at AUK Computing is to consult, design, and deliver cutting-edge solutions across industries. We always strive to be at the forefront of server and storage technologies, ensuring that we deliver the latest technology solutions to our clients. Our unique approach involves customising solutions according to our customers' specific needs rather than offering our predefined services. This tailored approach sets us apart from our competitors. We specialise in delivering bespoke servers that cater to unique customer requirements, and by partnering with esteemed organisations like IIT and TIFR, we continuously position ourselves as leaders in the market.

 **How do you approach personal and professional development to continue growing as a leader?**

As both the head of an organisation and an individual, I believe in having a strong vision for everything I do. I firmly believe in the power of self-conviction and teamwork, as success follows when you trust in yourself and your team. Transparency plays a vital role in my leadership approach, as it fosters clarity and, ultimately, success.


At AUK Computing, we value collaboration and encourage our team members to share perspectives. This collaborative environment has helped us create a great workspace. To summarise, my leadership philosophy revolves around vision, transparency, and collaboration.

 **How has the integration of AI enhanced your solutions and simplified things for your clients?**

AI has made a significant impact, as its penetration can be seen across industries. At AUK Computing, we believe in leveraging the

power of AI to offer a wide range of services and products that cater to diverse market segments, enabling businesses to deliver the best. With increased adoption of reality experiences like virtual, augmented, and mixed reality, we have partnered with NVIDIA and Intel, which have evolved the GPU into a computer brain at the exciting intersection of virtual reality, high-performance computing, and artificial intelligence.

Our customised hardware and plug-and-play solutions with all the software and toolkits bundled have allowed us to collaborate with leading global chip manufacturers and establish data-centric labs with emerging technologies. We help our clients with innovative bundled solutions by leveraging advanced technologies such as AI, FPGA, Applied AI (Smart Mobility), IoT, 5G, Robotics, and cyber security.

 **What factors do you consider when recommending server and storage solutions to clients, and how do you determine the best fit for their needs?**

At AUK Computing, we aim to take organisations one step ahead by combining leading-edge business consulting, IT solutions, and support services, driven by core values to bridge superior quality and affordable cost. There are many factors that we consider before recommending any solution to a customer. With a multi-faceted team, we ensure that we get an understanding of the customer's application, code, or job, and then we run or execute it on various architectures and platforms.

The insights gained from these activities enable customers to make informed decisions regarding their businesses. Additionally, we gather information from the customer about the intensity of their code or job in terms of CPU, memory, or network usage, as well as whether they have GPU-enabled codes. Through our well-defined process, we deliver tailored and optimised solutions that precisely meet our customers' needs.◆

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# SELF-DRIVING CARS AND THE EXPANSION OF AUTOMOTIVE VALUE CHAIN

When we think of automobiles, we usually form some version of an image in our minds where someone is driving a car on the road. This image of a passive machine needing an operator is moulded in our brains by the 20th-century status quo of how cars take place in our daily lives. However, with the advancements in robotics, AI, cloud and Big Data, the status quo is about to change dramatically.

We are on the cusp of a revolution in the automobile experience powered by industry 4.0 technologies. Self-driving cars with SAE Level-3 and Level-4 capabilities will most likely become mainstream before the end of the decade. These capabilities include autonomous driving with minimal (Level-3) or no (Level-4) human supervision within a constrained geography. Several companies in the USA, Europe and China are pushing the boundaries to provide self-driving capabilities in large urban metropolitans as well as highways.

Depending on the size and number of self-driving-enabled locations, there is no doubt that autonomous cars will transform the automotive value chain.

The automotive companies of the future will not just be manufacturers of passive machines that always need human operators (drivers). These companies will rather become transportation service providers like airlines. Thus, the automotive value chain will expand beyond purchasing a vehicle into our daily lives as an on-demand autonomous chauffeur service.

Will the automotive companies choose a robotaxi business model, implement personal autonomous cars to charge subscription fees or both? We do not know that yet. What we know, though, is that this can all happen only if the revolution succeeds.

My choice of the word revolution is not coincidental by any means. This is so much more than just new technological advancements. There is a certain cultural and sociological aspect to it as well.



**Haluk Ay, PhD**  
 Staff Engineering Analyst,  
 Cruise

Will society perceive this new technology as a means of societal transformation or a gimmick? Will we transform our routines and habits with dependence on this technology or not? Will governments support this transformation with large-scale infrastructure projects to increase safety and reliability and reduce operating costs? The definitive answer is still yet to be seen, but one thing is certain. As long as the pursuit of advancement in self-driving technologies continues, we can expect autonomous transportation to creep into our daily lives and be part of the automotive value chain in the near future. ♦



The Young & Dynamic Robotic & Simulation Expert

# DINESH JHAKAL

Head - Robotics & Simulation,  
Chropynska India

Value people, talk to those who have done it. But at the same time, never be complacent—continuous improvement must go on.



Within just 15 years of his professional journey, Dinesh Jhakal has carved a niche for himself in the robotics and simulation industry. He has deep expertise in industrial robotic engineering and a demonstrated history of working in the automotive industry. A strong engineering aficionado, Dinesh is highly skilled in KUKA, Fanuc, and Nachi robot programming, pneumatics and vacuum, jigs and fixtures, and different BIW applications.

TradeFlock interviewed this head of robotics & simulation at Chropynska India to understand his unique skills and expertise in robotic automation, the challenges he faces, and his advice for young professionals.

## What aspects of technology and innovation get you excited? What brought you here?

In today's era, we are surrounded by technologies. Personally, I like to work with industrial automation, which consists of control systems, PLCs (Programmable Logic Controllers), industrial robots, and information technology to handle industrial processes and machinery, replacing manual labour and improving efficiency, speed, quality, and performance.

Further, now we have the Industry 5.0 revolution, which makes people work together with robots & smart machines leveraging advanced technologies such as big data analytics, the IoT (Internet of Things), and several others. Robots are integrated to work with humans, helping to get the job done.

It will revolutionise manufacturing systems worldwide by preventing repetitive tasks from being performed by human workers. This means that the robots are not replacing humans, rather complementing their capabilities, and relieving them of strenuous tasks.

## What are different types of robotic automation?


Generally, whenever we hear about robots, humanoids come to mind. But they're just one of the types of robotic automation. Robotic automation is becoming a big part of today's industry, whether it be the manufacturing sector, IT sector, automotive sector, medical industry, or supply chain industry.

Even for domestic use, now a days, we have home automation. We just give a voice command, 'Alexa, turn on the light' and the job is done; there is no need to get up and switch on the light manually.

In the IT sector, we have RPA (Robotic Process Automation). Just like people, software robots do things like understand what's on a screen, complete the right keystrokes, navigate systems, identify and extract data, and perform a wide range of defined actions.


Similarly, in automotive and manufacturing sectors, we have industrial robots and PLCs to automate the production system. Robots are doing most of the jobs like welding, sealing, painting, assembly, etc. in automotive plants.

If compared to people, robots are doing their job much faster and more consistently, without asking for a coffee break or so.

 **Kindly shed some light on the most significant project you have undertaken and what are your biggest learnings from it.**

I was fortunate enough to get the opportunity to work with some big automotive players like Tesla, Mercedes-Benz, Volkswagen, Skoda Auto, Honda, Maruti Suzuki, TATA Motors, and others. During these projects, I worked in different geographic locations like North America, Europe, the Middle East and the Asia-Pacific Region.

Different technologies are being used in different automotives. With every project, there are always new opportunities to learn. Japanese companies majorly focus on optimum cost, light weight and fast execution. On the other hand, European companies prioritise the strength and safety of their products. Other than technical, they also made me learn different working cultures across the globe.

 **In which domains do you see the biggest impact for robotics & automation in the coming years?**


The manufacturing industry is already investing heavily in industrial robotics and automation to increase efficiency and reduce costs. This trend is expected to continue, with robots taking over repetitive and hazardous tasks previously performed by humans.

Additionally, robotics and automation can further be efficiently utilised in healthcare, supply chain, warehouses, and agriculture, amongst others. They have potential to transform the healthcare industry by improving diagnosis, treatment, and surgery. Robots can assist in performing surgeries with greater accuracy and a less invasive procedure. They can also be used to monitor patients and deliver medication.

 **How are you planning to embrace the newest innovations in your industry? Brief us about the potential challenges and how you are gearing up for them.**

Today is tomorrow's yesterday—technology never stops. It is growing exponentially. Staying current with technology is a big challenge.

One must keep a close eye on emerging technologies. Today, life is too fast. We don't have much time in our daily routine. Time management is the key. One must invest, especially in terms of time, to keep oneself updated with technology.

 **What's the best piece of business advice you've ever been given? What advice would you give?**

During one of my projects at Tesla Motors Inc., I've witnessed Elon Musk in action. He was not only attending board meetings with top management but also interacting with project team members on the shop floor and considering their improvement suggestions.

That was a live demo of business advice for me: "People are the principal success factor; value them and be open to suggestions." Secondly, while working with TATA, I've experienced "people-first culture". If you value people, they'll feel honoured & add more value to their job and ultimately to your business.

My advice would be similar too, "Value people, talk to those who have done it. But at the same time, never be complacent—continuous improvement must go on."◆◆

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# SIGNIFICANCE OF DATA ANALYTICS IN THE IoT ECOSYSTEM



**Debjit Mookherjee**

Head of IoT & Advanced Industries,  
Enterprise IT, Ericsson

Industry 4.0 Market size is expected to grow from USD 94.42 billion in 2023 to USD 241.58 billion by 2028, at a CAGR of 20.67% (Mordor Intelligence) and this phenomenal growth is attributed to the growth of technologies in areas of IoT, AR/VR, blockchain, industrial robotics, AI, 3D printing and digital twins with IoT particularly being the strongest driver as manufacturers are increasingly focusing on streamlining heterogeneous manufacturing processes and increase production efficiency.

By 2050, there will be 24 billion interconnected devices, meaning almost every object around us: types of machinery, streetlights, electric metres,

fitness trackers, forests, water bodies, crops, cars, elevators, and even gym vests. These IoT-enabled devices contain sensors that constantly collect and react to data, and this vast level of data can be used to unlock new levels of intelligence through IoT Analytics.

## IoT Analytics for Enterprise -

IoT Analytics is not transforming businesses but liberating them to thrive in the new digital reality yielding invaluable operational intelligence like real-time performance management data coming directly from the manufacturing line, reducing manufacturing costs through predictive maintenance, and increasing flexibility and agility, thereby maximising revenue growth. Manufacturers can expect a 10 times return on their investment and with 4.3 billion wireless connections in smart factories anticipated by 2030, it's clear where things are headed.


## IoT Analytics for Consumers

In healthcare, better monitoring technology like wearables to track body temperature and heart rate helps people do more

at home, reduce the need for doctor visits, save costs and improve life.

In sports, IoT analytics help ensure both athlete safety and enhanced training. Player development is a key area of focus and data collected by sensors worn by players can be processed to derive insights on player efficiency and thereby formulate effective game strategies.

In automobiles, IoT analytics is crucial for improving car performance, efficiency, and experience and reducing carbon footprint. It is a key enabler in the future development of connected automobiles.

As leaders, we need to play an active role in bringing the right IoT analytics to use and improve the lives of people and the planet. As we proceed in our liberalisation journey from here, IoT analytics will become even more critical to the way we choose to live. As individuals, the choice is yours, you wait to react to events or embrace a growth mindset, understand what is needed in the future and start working on it constructively to build a sustainable beautiful world. Just No Limits... Except for Your Imagination! 



*An AI Visionary Pioneering Innovation  
& Redefining Possibilities*

# NAUSHATH MOHAMMED

*Senior Director, Sutherland*



The AI revolution is underway. While previous industrial revolutions focused on physical advancements like the steam engine, combustion engine, and computer revolution, the fourth Industrial Revolution is centred around AI. It is driving innovation and smart solutions across different industries.

At the forefront of this seismic shift stands a visionary, Naushath Mohammed, who was among the first to recognise and harness the boundless potential of AI. Naushath is the Senior Director at Sutherland, and with an impressive tenure of 17 years under his belt, he has meticulously guided complex software development and automation projects to completion. His contributions have significantly shaped the landscape of AI through his revolutionary innovations, meticulous analytical prowess, and extraordinary leadership acumen. Our team at TradeFlock had the privilege of sitting down with Naushath, diving deep into his experiences, the successful strategies he implemented to tackle the ethical and societal challenges of technology, his noteworthy accomplishments, and his plans to explore opportunities and motivate the next generation of AI leaders.



## **How do you leverage your 17 years of technology industry experience to drive innovation and automation projects in your current role?**

During my journey, I've worked on various projects, each presenting its own challenges and interesting aspects. Overall, it has been a great learning experience, and I've always focused on turning opportunities into tangible results.

In my current role, I approach tasks with a combination of technical expertise, strategic vision, and leadership skills, applying the knowledge gained from past experiences.

In my approach, I emphasise several key aspects. Firstly, my extensive experience enables me to identify new opportunities by understanding various industries and emerging technology trends. Secondly, I build collaborative teams with diverse skill sets to work together efficiently. Additionally, I prioritise a user-centric approach, seeking to understand end-user challenges and requirements, to ensure impactful solutions. Moreover, I foster a culture of innovation, encouraging experimentation and learning among team members.

Lastly, I invest in continuous learning and development, actively participating in conferences, workshops, and online courses to stay abreast of AI and technological advancements.

**?** **Throughout your career, what do you consider your most significant achievement?**

My success is rooted in adhering to the STARS principles of strategic management: Startup, Transformation, Accelerated Growth, Realignment, and Sustainable Success.

In startups, I formed teams from scratch, uniting industry experts and creative minds from educational institutions. I also transformed existing teams, optimising their position in the market for scalability and growth. This led to remarkable achievements, surpassing expectations. Additionally, I realigned teams' objectives and strategies to match market dynamics, ensuring sustained growth and competitiveness.

By combining years of practical experience with cutting-edge insights from continuous upskilling, I developed A-class products that leverage AI, ML, and Large Language Models. This remains my most significant accomplishment to date.

**?** **Your vision for AI-driven technologies and their impact on business processes and customer-facing products? How are you implementing this in your career?**

AI's future is bright, set to revolutionise various sectors. Research papers like "Attention is all you need" have already improved language processing, simplifying and enhancing its efficiency. I believe that AI-powered automation will efficiently streamline processes and boost productivity, allowing companies to scale innovation and profitability.

AI is likely to advance business automation, personalisation, and customer experience, particularly revolutionising healthcare and biotechnology. However, as AI's prevalence grows, ethical and regulatory considerations are crucial for transparency and fairness. Businesses must continually learn about AI, ML, and IoT to leverage their potential, focusing on efficiency and customer experience. Implementing responsible AI practises, with an emphasis on data privacy and fairness, is essential.

**?** **What is your strength as an AI professional? How does it help you drive innovation?**

I possess a deep understanding of AI structures and exceptional problem-solving

abilities fueled by creative thinking. This empowers me to tackle challenges with ingenuity, resulting in unique AI applications that drive innovation.

I prioritise fostering innovation by exploring unconventional ideas and thinking outside the box, leading to groundbreaking AI applications that push the boundaries of the field. With AI continually evolving, I embrace new technologies and methods, maintaining adaptability to pivot and drive innovation in the dynamic industry swiftly.

My strengths have translated into successful AI solutions addressing real-world problems, elevating user experiences, streamlining business processes, and making positive contributions across various industries.

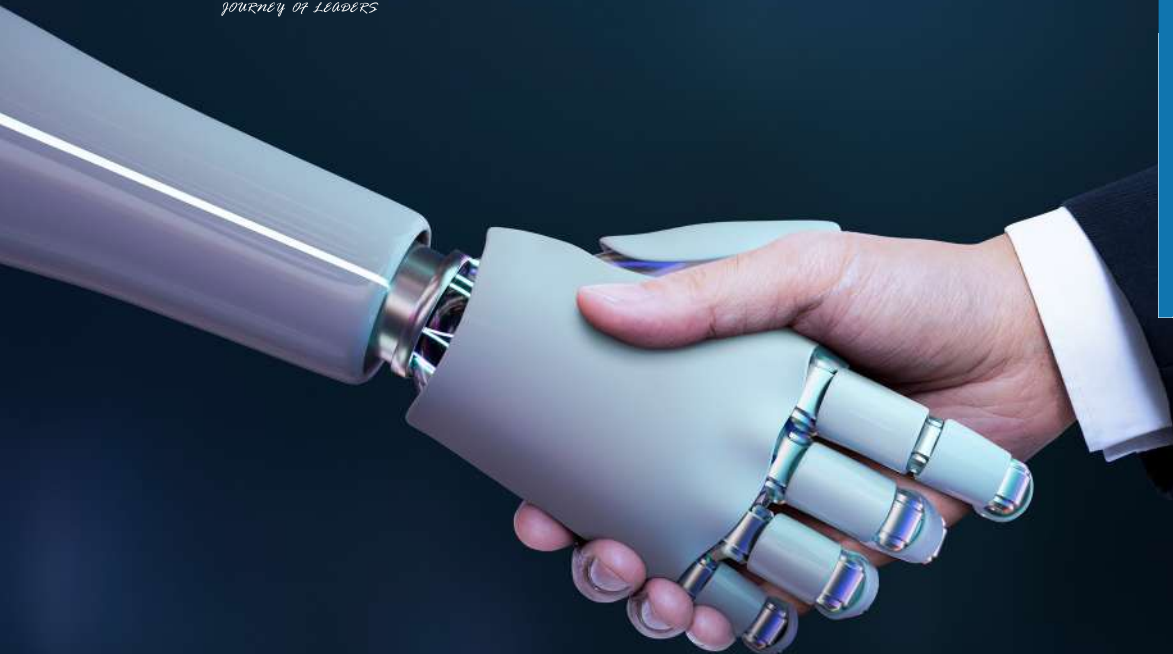
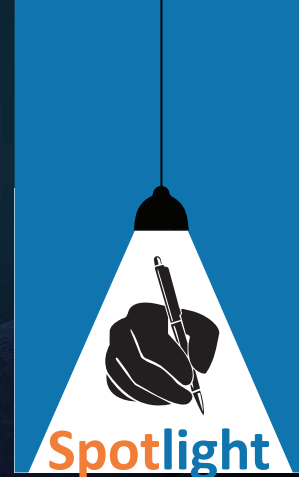
**?** **Share an innovative concept or product from your career that you believe has the potential to change the world.**

As technological advancements continuously evolve and can be influenced by various factors, it is tough to predict specific groundbreaking technologies. However, based on current trends and ongoing research, I can see that Quantum Computing, Biotechnology and Genetic Editing, Renewable Energy and Energy Storage, Augmented and Virtual Reality, Space exploration and commercial spaceflight, and brain-Computer Interfaces have significant potential. I also see that Explainable AI (XAI) has the potential to revolutionise the AI landscape and transform the world.

**?** **If you could go back in time and give your younger self one piece of advice before embarking on your professional journey, what would it be?**

Looking back at my journey, I can't help but acknowledge that one passion that ignited the fire within me was professional cricket. If I could turn back time, I would undoubtedly whisper to my younger self to embrace both dreams wholeheartedly.

With the spirit of "Onward Ever, Backward Never" etched in my heart, I would charge forward, knowing that each step, whether on the cricket pitch or in the world of computer science, contributes to the symphony of my aspirations. Embracing both passions harmoniously, I would let the fire of determination guide my path. ♦♦



# HUMAN-MACHINE COLLABORATION: EMPOWERING THE WORKFORCE WITH ADVANCED TECHNOLOGIES

At 1 AM, UX/UI designer Rishi searched for fresh ideas on Pinterest for a crucial travel app project. Stumbling upon "Midjourney AI," he registered out of curiosity. Sceptical about its promise, he was amazed when the app generated mesmerising design layouts. Rishi's world of design possibilities expanded beyond imagination, boosting his confidence. Working tirelessly throughout the night, he created outstanding designs. The next morning, he presented the revamped designs to his team, and their excitement mirrored his own. The designs were fascinating, creative, and innovative, elevating the project to new heights with ease.

Rishi's story exemplifies how extensively AI is empowering

the modern workforce as well as how it's on the road to creating a 'Human-Machine' collaborative work environment in future. AI not only has the potential to handle mundane tasks but also to provide valuable insights, enabling humans to make well-informed decisions. It's not only empowering individuals and teams,

paving the way towards a harmonious 'Human-Machine' collaborative work environment but also cultivating a thriving space for innovation and creativity.

AI is indeed transforming various industries with remarkable achievements in the same, let's have a look at this table highlighting a few of them.

| Industry   | AI Impact  | Source                 |
|------------|--|------------------------|
| HR         | Reduced time-to-hire by up to 70%  | Pulserecruitment, 2023 |
| Content    | Projected 20% of all business content  | Gartner, 2021          |
| Marketing  | 19% average increase in sales  | Forbes, 2023           |
| Creativity | 79% of marketers credit AI for enhancing creativity through valuable insights and innovative ideas | Salesforce, 2020       |
| Technology | Remarkable 270% increase in AI adoption, fueling automation and data analytics                     | Gartner, 2021          |
| Sales      | 50% rise in leads, leading to a 30% boost in conversion rates                                      | Gartner, 2021          |

## Empowering Workers For A Fulfilling Future

In May 2023, PwC revealed that a staggering 72% of business leaders share the belief that AI is not just a mere tool but an agent of transformation. Its profound impact lies in enhancing employee performance by augmenting their decision-making capabilities.

Imagine a world where workers are empowered to accomplish tasks with unparalleled efficiency and precision. SnapLogic, in their 2021 survey, has provided compelling evidence to support this vision, with 61% of workers expressing that AI adoption within their workplaces has directly translated to a remarkable boost in productivity. This statistic is a resounding testament to the potential of AI to revolutionise the very fabric of work culture.

The amalgamation of human intelligence with AI-powered insights not only expedites mundane processes but also unlocks the full potential of human intelligence, allowing workers to focus on tasks that require creativity and emotional intelligence. As AI takes over repetitive tasks, it paves the way for a more fulfilling work experience, leading to higher job satisfaction and reduced burnout rates.

## The Shifting Landscape Of Work And Opportunity

As per the reports published by the World Economic Forum in October 2020, AI will replace 85 million jobs by 2025. This spectacle that AI's impact on jobs today and especially tomorrow is a double-edged sword. On one hand, it brings incredible efficiency and innovation to various industries, making work more productive. However, it also



## BENEFITS OF AI IN THE WORKPLACE

- **Augmented Creativity and Innovation:** AI acts as a collaborative muse, inspiring human creativity to reach new heights. AI-generated ideas and suggestions can spark novel approaches in product development, marketing campaigns, and problem-solving, fostering a culture of innovation within the workplace.
- **Predictive Workforce Planning:** AI's predictive analytics can anticipate future talent requirements based on historical data and market trends. This aids HR departments in strategic workforce planning, ensuring the right skills are available when needed and minimizing skill gaps within the organisation.
- **Ethical Decision Support:** AI is becoming instrumental in addressing ethical dilemmas by offering objective perspectives. It can analyze complex ethical considerations, ensuring businesses make responsible decisions that align with societal values and stakeholder expectations.
- **Enhanced Employee Well-being:** AI-powered wellness programs can monitor employee stress levels, workloads, and work-life balance, enabling timely interventions and promoting a healthier workplace environment.
- **Multilingual Collaboration:** AI-driven language translation and interpretation tools break down communication barriers among global teams, fostering seamless collaboration across diverse cultures and languages.

leads to concerns about job losses due to automation.

Currently, AI is already deeply integrated into many sectors, taking over repetitive tasks and streamlining processes. This shift displaces some workers, requiring them to adapt and seek new opportunities in emerging fields driven by AI. While this may cause anxiety, it also opens up exciting prospects for creative collaboration between humans and AI.

In marketing and sales, AI-powered data analytics can provide valuable insights into customer behaviour, leading to more targeted and personalised campaigns, ultimately boosting revenue. In customer service, AI-driven chatbots and virtual assistants can enhance support efficiency, resolving queries faster and improving customer satisfaction.

Within finance, AI algorithms can optimise investments and detect fraud, ensuring better financial outcomes and increased security. In operations and manufacturing, AI-driven automation streamlines processes, reducing costs and enhancing productivity.

Rather than leading to job losses, AI creates new roles in data science and AI training, where professionals play a critical role in developing and refining AI models. Ethical AI oversight becomes crucial to ensure responsible and unbiased AI implementation. Moreover, AI-generated art opens new avenues for artists, enabling them to collaborate with technology to create awe-inspiring digital masterpieces.

In this unfolding narrative, AI becomes a catalyst for progress, nudging society to reimagine the nature of work and our place in it. By harnessing AI's potential while preserving our unique human essence, we can create a harmonious future that marries human ingenuity with the power of AI. ♦



*The Farsighted Visionary*

# PRASHANT KAUL

*Regional Sales Director,  
Corsight AI*



Prashant Kaul, currently Regional Sales Director at Corsight AI, is a seasoned Technology Transformation Leader with 22 years of experience in companies like Thales Group, 3M, HCL, Ingram Micro and 2 startups (AI, IoT and multiple SaaS/PaaS products). Prashant's leadership experience in driving varied functions within technology driven organisations – business transformation, MVP development, building and managing C-Level interactions, executing country strategy – all have contributed to his growth into a seasoned business executive.

Prashant has been a strong believer in the value of networking, and he has successfully delivered valuable business outcomes throughout his career. A foresighted leader, Prashant's keen interest to constantly track technology development and customer's needs, has pivoted him to engage with key players within the AI/ML domain. His ability to understand the local market/customer expectations and engage with the Global teams to repackage and reposition products/solution to make it 'market fit', has seen significant success for him and the businesses that he represents. Being proactive by nature, Prashant is always ready to engage and explore new challenges with customers.

TradeFlock interviewed Prashant to discuss about his challenges, tricks to balance sales and revenue with the needs, and strategies.



**Let's start by discussing some core challenges you face and how you tackle them.**


In context of the India market, the challenges we face are also opportunities for a company like ours to really differentiate ourselves in the marketplace. Let me explain some specific areas:

**Product Integrity:** There are no regulatory expectations or technical certification requirements in the AI sector, therefore, this leads to a crowded market where a majority of the players can make tall claims without any mechanism to test and validate efficacy of the technology. While this is a challenge, this also plays to advantage for tested and mature technology providers who can bring significant product integrity to the customers.

**Client Trust & Education / Category Development:** While the buyer maturity and understanding of AI/ML technology is still improving, this often means that potential clients get exposed to unforeseen risks by going down the route of "un-tested" and "self-certified" technologies. We undertake specific initiatives to educate the client on these risks, often, this would mean setting up a pre-tender POC environment and inviting all solution-providers can be invited to test their solutions against same set of identified client requirements. These builds trust in the product, process and 'market fitness' of the solution. This is a critical area for us as some of large consumers of this technology are the public service

domain companies where we could be exposed to significant risk exposure for data related citizens, VIP protected and physical assets.

**Approach to deploying Innovative solutions is not backed by a innovative approach:** The other big challenge that I regularly encounter with buyers (largely public entities / government clients) is that even though they establish a “strong case” and “value” with the latest AI-based innovative solution, the agencies do not seem to have any provision or any separate fund to fund “innovation”. Instead, the AI-based companies are still expected to go through the same qualification and procurement process that is based on traditional Tendering process with L1 as the core criteria of selection, which is quite contrary to the whole spirit of innovation. Our approach to address is to keep our product frugal and value driven, differentiate on not just cost but quality of delivery through better educating the client and building confidence. This may include getting a small ‘foot in the door’ to pilot certain products, deliver value and build scale based on the success of the pilot.

 **How do you balance the need to drive sales and revenue with the need to maintain customer satisfaction and loyalty?**

These are all interconnected areas rather cyclical with one driving the other. I am a strong believer in building trust with client through integrity, transparency and understanding ‘what success looks like for them’. This enables me to tailor and deliver a solution which really meets/exceeds the expected outcomes.

While everyone will agree that establishing a “niche value” is a pre-cursor for any technology sale to happen, however, in reality, the “buyer/customer” has already started to form an opinion about the product/solution even before actual purchase – by virtue of all his interactions with the company personnel at every touchpoint of interaction.

Working with different global technology and consulting cultures has really been a great learning experience for me personally. To succeed in driving AI-based products and solutions in India, it is very important to clearly bring out those 1-2-3 “key differentiators” and establish a “strong value proposition”, which, in turn, creates a strong customer demand that ultimately drives the product sales (unlike many other “me-too” products).


In such a scenario, it has become pertinent to design and implement customer acquisition strategies in such a way that there always exists clarity of purpose, clarity

in communication and also accountability in every customer interaction. Customer satisfaction and loyalty will surely follow.

 **What strategies do you implement to analyse the regional market and create new sales growth opportunities?**

Being in a leadership role with several product companies, in addition to inputs collected from teams on the ground, I regularly access market intelligence reports to get updates on how the “interconnected ecosystem” around me is evolving, and what is its play in the regional context. Once the regional play is duly validated through follow-up industry consultations, I encourage an internal discussion on “potential impact analysis” of these trends at the regional level, to get a fair glimpse of possible impact on sales and revenue in the near future (next 2-3 years), and hence building appropriate risk mitigation strategies.

As a sales and strategy leader, I constantly encourage my team to focus on creating “value” for our AI solution. Once value is duly established and recognised, we then encourage our clients to compare us with others and challenge us for more. For me personally, I find accepting new challenging assignments is a far more rewarding experience.

 **How are you rolling up your sleeves for the future of technology sales? What role do you see yourself playing in that future?**

In today’s flat and interconnected world, innovation continues to thrive and drive the world. The concept of MVP has really accelerated the pace at which companies are able to bring innovation to market without burning huge amount of cash. All this does create an opportunity (or a threat, depending on which side of the table you are). To be relevant in the future, I believe that as individuals every year we should “invest” some time to get familiar and acquainted with some of these new age technologies – IoT, Data Science, AI, etc. Today, one may not be directly associated with these technologies, however, very soon these technologies are going to be intermingled in everything that surrounds us, and then to remain relevant, we will have no option but to be involved and to be able to understand and speak their lingo. In this respect, I have already started making “investments into my personal growth” in these technologies - Data Science and AI. ♦

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# TRANSFORMATIVE POTENTIAL AND ETHICAL CONSIDERATIONS

**A**rtificial Intelligence (AI) has emerged as a transformative force, shaping the future of human civilisation across various industries. Recent breakthroughs in AI have accelerated progress in areas like healthcare, finance, transportation, and user experience. At the forefront of these advancements are Large Language Models (LLMs), revolutionary AI systems designed to process and generate human-like language, unlocking unprecedented potential in the field.

LLMs leverage vast amounts of data to learn statistical patterns and relationships between words, enabling them to perform various language-related tasks without explicit instructions. Their application in generating software programs based on human language instructions is particularly exciting, representing a groundbreaking concept known as "Automated Machine Learning." This approach enables AI to continuously improve itself, freeing researchers and developers to focus on higher-level challenges while AI autonomously progresses beyond traditional limitations.

However, while self-learning AI presents a realm of possibilities, it also raises concerns regarding bias. Bias in AI refers to situations where the training data provided to the program lacks diversity or is influenced by certain prejudices, resulting in discriminatory and unfair outcomes. Addressing bias in self-learning systems remains a pressing challenge in the quest for responsible AI development.

An innovative application of LLMs lies in document understanding. These models excel in comprehending the context of documents, extracting factual information, identifying key topics, and providing concise summaries. Additionally, LLMs adeptly convert unstructured text into a coherent format, making it easily understandable for both humans and traditional software systems. A remarkable achievement is their ability to answer questions based on document content, offering accurate responses without the need to sift through lengthy documents manually.

As the world of innovation evolves with AI at its core, the applications of LLMs continue to unlock new possibilities. Their ability to generate software, understand documents and process



**Sahil Narain**  
Co-Founder & CTO,  
Xane AI

language has far-reaching implications, reshaping the way we interact with technology. However, while AI propels us into a new era of possibilities, ethical considerations and addressing biases must remain paramount in AI development.

As technology progresses, we anticipate even more groundbreaking innovations, propelled by the constantly evolving landscape of AI applications. From automating complex tasks to improving decision-making and revolutionising user experiences, the future of AI-driven innovations promises to reshape the world as we know it. By harnessing the potential of LLMs responsibly, we can forge a path toward a brighter, more equitable, and technologically advanced future. ♦♦



*The AI Trailblazer Driving Business Innovation*

# SAHIL MAKKAR

**Director - AI,  
Happiest Minds Technologies**



In the rapidly evolving landscape of Artificial Intelligence and Data Analytics, one name that shines bright is Sahil Makkar, Director-AI, at Happiest Minds Technologies. With an extensive background in AI leadership and consulting, Sahil has consistently delivered innovative solutions to businesses, empowering them to make data-driven decisions and achieve unprecedented growth. His journey has been marked by groundbreaking achievements, and his contributions have left a lasting impact on various industries.

Sahil's journey in the world of AI began with a passion for solving complex business problems and addressing customer pain points. Armed with a comprehensive understanding of the Data & AI spectrum, he drastically established himself as a leader with a unique ability to empathise with clients and create strategies that aligned with their specific business goals. As an AI consultant, Sahil's exceptional consulting skills helped organisations optimise their operations, driving growth and success through data-driven decision-making.

## **Driving Growth and Innovation**

One of the significant chapters in Sahil's career unfolded at Happiest Minds, where

he serves as an AI leader in the Analytics Center of Excellence (CoE). Here, he plays a pivotal role in propelling the growth of the AI practice by an impressive 3X. Sahil's visionary leadership spearheaded innovative offerings, including Adaptive AI, AI@Scale, MLOps, Generative AI, ChatGPT, and Computer Vision. Additionally, he led marketing and healthcare analytics practices, showcasing his versatility and expertise in diverse domains.

Sahil's impact extended to the entertainment industry, whereas an AI leader at Viacom 18, he made groundbreaking contributions. His team successfully developed a cutting-edge recommendation engine for the Voot app, transforming the way users discover personalised content. The engine utilised advanced machine learning algorithms and data analytics techniques, delivering highly personalised recommendations based on user preferences and viewing history.

At his previous organisation, Genpact, Sahil played a pivotal role in transforming the offering of NLP and AI. His introduction of deep learning and generalised NLP techniques led to successful deliveries in AI, race optimisation, and insurance analytics. As a leader, Sahil actively engaged in numerous pre-sales calls and consistently delivered

projects that exceeded client expectations. His expertise in AI and data analytics brought innovation to the forefront, reshaping the way businesses leveraged data for growth.

### **Specialities and Skills: A Multifaceted Leader**

Specialising in AI and data analytics, Sahil possesses a unique blend of offering creation, thought leadership, GTM strategy, and exceptional consulting skills. His leadership, team management, and entrepreneurial mindset make him a force to be reckoned with in the AI industry. Moreover, Sahil's expertise spans various domains, including consumer electronics, media, healthcare, EdTech, retail, and HiTech, enabling him to make an impact across diverse sectors.

His journey has been defined by continuous growth, impactful roles, and a relentless pursuit of excellence. From serving as a Director of AI and Principal Data Scientist at Happiest Minds to leading AI-based initiatives at Genpact and Viacom 18, each milestone has added to his prowess as an AI leader. His tenures at LTTTS and Wipro further enriched his experience, shaping him into the multifaceted leader he is at present.

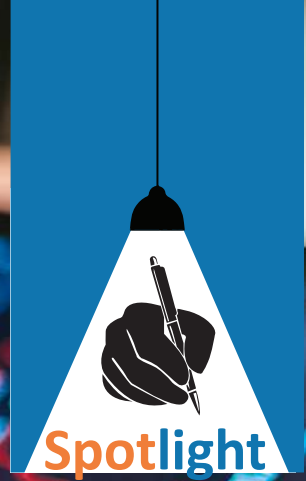
### **Beyond the AI World: The Social Impact**

Beyond his professional achievements, Sahil is also a dedicated volunteer in various social service initiatives. Under the banner of YPSS, Sahil has actively contributed to programs focused on drug prevention, environment protection, gender equality, and uplifting the visually disabled. His commitment to social reforms and community welfare showcases his compassionate and empathetic nature, further highlighting his role as an exemplary leader and advocate for positive change.

In the ever-evolving world of AI and data analytics, Sahil's name will undoubtedly remain synonymous with innovation, growth, and customer-centric solutions. His journey from a passionate problem solver to an AI leader exemplifies the transformative power of technology in shaping industries and making a positive impact on society as a whole. As Sahil continues to chart new territories in AI leadership, the future holds immense promise for businesses and individuals who will benefit from his expertise and visionary approach. ♦♦

Sahil has consistently delivered innovative solutions to businesses, empowering them to make data-driven decisions and achieve unprecedented growth.





# REIMAGINING FINANCE AND ACCOUNTING WITH GENERATIVE AI

The wide-spreading impact of AI can be understood with a quote by Dr. Andrew Ng, a leader in AI and founder & CEO of DeepLearning - "AI is the new electricity." Dr. Ng's quotation correlates the revolutionary potential of AI to how electricity transformed both the corporate and public sectors by becoming an essential utility. A growing number of aspects of life and business are being powered by AI, much like electricity. With the introduction of generative AI, organisations seem to overcome the complexities

that come with finance and accounting. The promise of generative AI in finance and accounting is magnificent, and a recent study by IBM indicates it clearly. As per the study, executives anticipate that 48% of the workforce across their organisations (including 34% of finance staff) will utilise generative AI to perform their routine tasks in the next year.

## Overcoming the Finance and Accounting Hurdles with Generative AI

Generative AI can substantially impact finance and accounting

by automating and improving crucial accounts payable, accounts receivable, expenditure management, liquidity management, inventory control, cash flow management, and working capital management operations. Generative AI increases these operations' effectiveness, economy, and adaptability through automation and skillful analysis of enormous data sets.

AI allows finance professionals to keep their focus on tasks and activities of higher value, such as strategy-making and analysis, rather than



transactional activities. On the Other hand, generative AI helps make quick and data-driven decisions grounded on market trends and historical data. It uses AI-based algorithms that identify patterns that are usually overlooked by traditional analysis techniques.

As generative AI algorithms are being used in the financial process, human accountability would be crucial, particularly considering the pace at which many finance and accounting teams are leveraging AI. Ensuring human intervention to validate transactions and reports before final sign-off would be essential. Operators deploying the technology in finance and accounting processes should keep tracking and validating the accuracy and inclusiveness of the input and output generated.

Finance professionals should assess the associated risks and potential financial exposure that could negatively impact their operations and processes. With the wide adoption of these self-serve solutions, some business leaders may start relying completely on new and AI-powered financial advisors for decision-making. Some of them might bypass the finance and accounting layer or might assume that provided information has already been reviewed by the finance department. Therefore, developing trust and internal business collaboration between finance and other business departments is essential.

Businesses have increasingly depended on robotic process automation to optimise their finances and operations in

recent years, notably when processing payroll data, expenditure reports, and examining legal papers. They have also used other forms of artificial intelligence, such as machine learning, to estimate future cash flows and predict various financial scenarios. Generative AI is expected to be the newest technology to assist businesses in improving their capacity to anticipate performance, close books faster, and do data analysis to better investment decisions.

It is very clear that generative AI has the potential to transform how we do business today in ways we have never imagined. With strong human accountability, it could handle the complications of finance and accounting to make things easier for F&A professionals. ♦



*The AI Champion*

# SATYAJIT DWIVEDI

*Regional Director, EMEAP, Energy & Utilities,  
Manufacturing & Public Sector, SAS*



An electrical engineer with management in Accounts & Systems, Satyajit Dwivedi began his career 28 years ago as a trainee engineer performing substation and captive power plant maintenance in a soda ash plant. He quickly learned the difficulties of performing preventative maintenance on static and rotating equipment at a time when manual and paper-based processes were the norm. In 1993, he joined Hindustan Petroleum, where he worked on real-time data acquisition and control applications, such as PLC/SCADA systems, High Voltage AC systems, and control rooms. This was his first exposure to big data and that sparked his interest in the field of data analytics.

Post his management, he started his journey in analytics, developing mutual fund performance algorithms for stock portfolios that outperformed market indexes. During one of the government consulting engagements, he observed that most of the IT applications designed are open-loop systems. With exposure to big data and the need for closed-loop automated systems in the decision process, he realised that analytics would be the best space to work for in the coming many decades. In 2004, he joined SAS and has since provided immense value in the AI industry to customers across diverse industries and regions. TradeFlock interviewed Satyajit Dwivedi, who has 20 years of experience in AI and who worked as Director, Global Practice, Process Sensor and IOT, SAS to learn more about his journey.

**Kindly give us a brief overview of your professional journey. How did you get involved in the AI industry?**

When I started my career, few digital solutions were existing in accounting, business process automation, and plant control systems. The

philosophy of data as an asset did not exist in corporations. When I joined IRIS after my management degree, my first work in analytics was when we developed an algorithm for evaluating fund performance and creating stock portfolios that consistently outperformed market index funds. Subsequently in 3i Infotech, when working on a couple of government consulting projects evaluating IT applications under the horizontal transfer program in 2003-2004, I noticed a glaring gap between outcome analysis and process feedback-based evaluations. Control systems theory was my favourite subject in engineering, and I believed a system would need continuous feedback for timely input and process corrections to operate in the optimal state. I concluded that analytics would be the best industry to work in over the next few decades. With that in mind, I joined SAS in 2004 and have worked in the AI industry ever since, delivering tremendous value to customers across numerous industries and regions.

**Over the last three decades, what are the challenges you have overcome, and what learnings do you take from them?**

I've had an exciting career journey, spanning diverse industries such as Chemical, Oil & Gas, Petrochemical, Capital Markets, Smart Government, IT Consulting & now AI powered Digital transformation. Working in a global role allowed me to work across different locations and industries, constantly adapting to change and developing value propositions that drive digital transformation initiatives with changing business perspectives involving profit, people, planet, and now purpose.

One key factor that has helped me succeed in my roles is my ability to appreciate and adapt to

the specificities of each geographic area, most importantly the culture. Working in a global role in an emerging area in 2021 was quite challenging. This required very close engagement with regional teams, building regional capacity to deliver strong results for the organisation.

To achieve my goals with confidence, I rely on self-motivation and constant learning. I firmly believe that having a high level of self-efficacy is crucial to overcoming challenges and turning them into opportunities for professional growth.

### **How do you approach the ethical considerations of AI development and implementation?**

Although there has been no common acceptance of definitions of AI in the computer science and technology world, it is considered a constellation of many different technologies working together to enable machines to sense, comprehend, act, and learn with human-like levels of intelligence. Therefore, the deployment of any AI solution needs to carefully address both the epistemic factors and the normative factors. The epistemic factors include inconclusive, inscrutable, and misguided evidence, and the normative factors include unfair outcomes (algorithmic bias, AI hallucination), transformative effects, and traceability. Autonomous and semi-autonomous systems with large historical data, numerous variables, and a mix of structured, and unstructured data, text, and images make the AI ethical consideration an arduous task. It requires human interventions to detect & adequately treat data quality issues, detect and transparently compensate for algorithmic bias, and gain the trust of the model, which is very important for continuous usage of the model.

The model outcome is very dependent on data; therefore, careful application of the eight data quality dimensions is critical: resolution, accuracy, completeness, redundancy, readability, accessibility, and consistency. Any AI deployment should have data quality rigor. Second, AI systems are responsible systems built on complex relationships. Therefore, AI models need to be explainable to be responsible for addressing the six factors: clarity, compliance, confidence, consent and control, challenge, and continuous improvement.

### **What are some of the most interesting projects you have undertaken? Can you please share your approach to risk management and modernisation?**

In the last decade, I have designed and deployed many digital transformation programs powered by AI, both in pragmatic services and aesthetic services side. Challenges come with four things: a) understanding the business need and the relevance of AI to solve the business problem b) the granularity of the data and the history

being considered, c) the type and the number of algorithms that need to be built for the solution, and d) integrating the whole decision process with real-time model deployment.

Integrated planning is a core process in Oil & Gas downstream & Utility sector that involves demand-driven planning (long/medium/short/very short time horizon) across the large network. There are several time series whose patterns need to be understood and future estimates arrived at with many influencing factors. In one of the O&G projects, 25000 demand time series were to be trained, forecasted daily, and integrated with supply planning. Different factors impact different time series to different degrees at different times. Deploying modern AI models for large time series requires both science and art. In a utility company, we undertook the modernisation of long-term forecasting and network capacity planning involving 1000 nodes in the distribution network. A significant increase in productivity and savings in cost was observed. Some of the AI-based predictive maintenance projects on rotary and static equipment for both diagnostics & prognostics have generated some astonishing insights, and the value per use case has been to the tune of \$2-5 million per year.

In the coming days, sustainability & ESG would drive digital transformation programs. I see digital transformations powered by AI would be focused on increasing energy efficiency, reducing carbon intensity, and optimising water footprint. Climate risk modeling and its integration with net-zero initiatives would become extremely important. Real-time monitoring of ESG metrics and developing scenario analysis to model the possible financial risks associated with climate change and assessing the resilience of individual financial institutions and the financial system AI would play a major role.

### **What is your roadmap? Can you please elaborate on some of your future strategies?**

At any given point of time, my future strategy has been to unlearn, learn and relearn. The importance of sustainability and the need of rigour to every learning process and the spare time during COVID made me register for PhD in Water Science & Governance in TERI School of Advanced Studies.

Future innovations should be aimed at mitigating the global risks that the world is currently facing. The greatest growth would come from AI-based solutions that address environmental and food security concerns, assist businesses in achieving net zero transitions, reduce carbon & water footprints, and provide equitable, cheaper, and faster remote access to healthcare. Sustainable living would be prioritised by companies driven by purpose rather than profit and AI should enable this journey. This is the best space to work for and my next two decades would be dedicated to younger generation pursuing "Zen and the art of earth maintenance". ♦♦

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# VOICE AI FOR BUILDING MANAGEMENT SYSTEMS & SUSTAINABILITY

**B**uilding Management Systems (BMS) are gaining significant popularity in light of the United Nations’ Sustainable Development Goals (SDG) and corporations’ Environmental, Social, and Governance (ESG) initiatives. The top 10 global leaders in the BMS space are all looking out for creative disruptions in the industry that has been largely stagnant for many decades.

Systems linked to a BMS typically represent 40% of a building’s energy usage; if the lighting is included, this number approaches 70%.

With the world getting more connected with the success of the Internet of Things (IoT) movement, the criticality of BMS systems is ever-accelerating, especially with the vast opportunity values they provide.

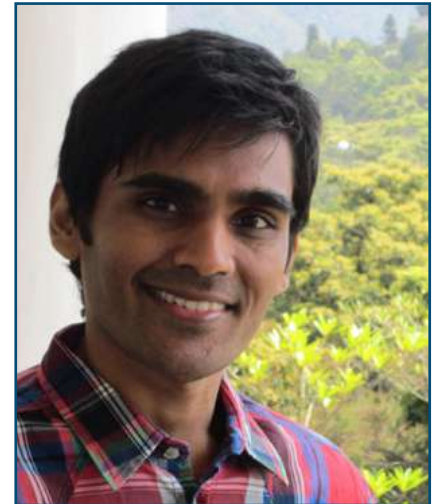
However, looking under the hood, most of these BMS systems target facility managers or IT administrators as their end-users. As a result, they fail to implement the bulk of user-centric innovations in the space. They largely depend on complex dashboards with specialized access privileges and trained operations staff to leverage the robust feature set of the underlying BMS — until now.

To cater to the needs of non-IT users like building tenants, guests and operational staff the industry needs a solution that is extremely natural and intuitive. One such technology that truly harnesses the power of natural language conversation is Voice AI. End users can simply speak in their preferred language with an AI to resolve their queries.

## Why Voice AI?

Putting a versatile Voice AI layer on top of a classic BMS has many advantages:

- **Automation and Ease of Use:** People don’t need complicated systems or dashboard access to leverage the power of a BMS · Operational Expense Reduction— Less training and specialization required to babysit the backend systems
- **SDG/ESG Compliance for Environmental Credits:** Focus on what matters more instead of how to make it happen
- **Energy Efficiency and Green Buildings:** Simplistic Monitoring and Automation



**Karan Sheth**  
Co-Founder and CTO,  
*SpeakToIoT*

- **Safety and Security:** Intelligent system to help lonely workers in odd hours or secluded locations
- **Inclusive Access:** Not just the facilities or IT people, but CxOs and ordinary occupants of shared building spaces can access BMS features over voice
- **Role-based Access:** Not everything is available for everyone in any enterprise/industrial system.
- **Multi-lingual Natural Voice Interface:** Support diversity and inclusion in the global multi-lingual workplaces of tomorrow. ♦



*Pioneering the AI Revolution*

# SUDHAKAR RAO

*Head, Asia Pacific Japan,  
GSI Partners, UiPath*



With an impressive 27-year track record in global sales, strategy, cloud, digitisation, collaboration, and transformation, Sudhakar Rao, the Head of Asia Pacific Japan for GSI Partners at UiPath, is a trailblazer in the world of AI, bringing his unparalleled expertise to drive organisations towards the forefront of technological innovation. At the helm of UiPath's Asia Pacific and Japan division, Sudhakar is on a relentless mission to reshape the digital landscape. Embracing the power of AI, he empowers businesses to not only stay competitive but thrive in the digital age. From attracting millennials to crafting unforgettable customer experiences, Sudhakar seamlessly integrates cutting-edge technology into the fabric of everyday life, unlocking endless possibilities for forward-thinking organisations.

Throughout his illustrious career, Sudhakar has navigated through diverse regions, effortlessly transforming challenges into opportunities. His mastery of design thinking and a proven track record of managing P&L and go-to-market strategies have fostered a results-driven culture that fuels success even in the most complex of situations. In his previous roles, including Vice President, Sales at SAP, Sudhakar made waves in the industry by propelling SAP's cloud and digital businesses to new heights. His strategic partnerships and innovative approach have

earned him widespread recognition as a dynamic leader in the technology realm.

With an unwavering dedication to leveraging AI for transformative change, Sudhakar's journey serves as a guiding beacon for organisations ready to embrace the future. In this exclusive interview with TradeFlock, he invites businesses to join him in shaping a world where AI-driven advancements redefine the very essence of innovation, propelling humanity towards a brighter and more promising tomorrow.




## **With over 27+ years of experience, how has your professional journey shaped your leadership style?**


Throughout my professional journey, I have traversed an unconventional path, transitioning from roles as an engineer, consultant, programme manager, and sales strategist to my current position as a thought leader in go-to-market and sales. My unwavering focus has always been on achieving customer success.

This arduous journey has not only honed my ability to develop and nurture the next generation of leaders but has also cultivated an environment that fosters inclusive growth and embraces transformational leadership. I am dedicated to inspiring and empowering individuals, fostering creativity, and moulding organisations to be future-ready.


My diverse experiences have shaped me into a professional who is committed to driving success and making a lasting impact on the organisations I am privileged to be a part of.

 **How do you attract millennials and integrate technology into their lives while adapting to the evolving needs and expectations of the younger workforce?**

At top-tier technology companies, innovation is ingrained in the culture, serving as their guiding principle. These companies create a space where individuals from all generations can collaborate to develop products that benefit customers, the environment, and society as a whole. Emphasising collective thinking and diverse perspectives, they foster future-ready solutions, making the younger workforce and emerging talent instrumental in shaping the organisation's future.


 **As a design thinking leader, how do you foster creativity and innovation within your team to adapt to the fast-changing tech landscape?**

Every organisation aspires to inspire their talent to become 'intrapreneurs,' actively driving an innovation culture. Design thinking serves as the bedrock for fostering diverse thinking and problem-solving, allowing teams to identify untapped opportunities and beyond. Embracing design thinking cultivates an agile and innovative organisational culture, nurturing a product-minded approach that accelerates innovation at break-neck speeds.


 **How do you see AI technologies transforming automation and impacting industries in the future?**

AI is set to revolutionise culture, computing, and predictability. Its potential to reduce social inequality and combat climate change through information processing and analysis is significant. When combined with human efforts, AI can amplify the impact of actions taken. As AI becomes more prevalent, the roles and responsibilities of all stakeholders will be transformed, fostering a collaborative work culture with transparent outcome measurements.

Automating transactions will enable continuous real-time learning and enhance cognitive executive functions, contributing to exceptional leadership talent. Across industries, AI will bring transparency, speed, and sustainable innovative solutions, elevating customer and stakeholder experiences to unprecedented levels. Both governmental and non-governmental bodies stand to benefit from AI's transformative power.

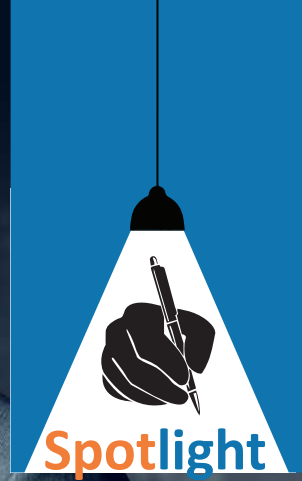
 **As someone who values philanthropy, could you share your experiences volunteering with organisations like Habitat for Humanity and the Salvation Army?**

Since my early days as a child, giving back to society has left an indelible mark on my life. Volunteering has been a transformative experience, opening my eyes to the challenges faced by our communities and the power of teamwork in creating lasting change. The invaluable lessons learned have not only instilled a sense of purpose but have also honed my thinking and leadership skills. It has shaped me into a better thinker and a more compassionate leader, driven to make a positive impact on the world.

 **Can you share some of your favourite hobbies or interests outside of work that help you unwind and recharge?**

ESG (Environmental, Social, and Governance) is a topic close to my heart, and I strive to be a responsible citizen, promoting sustainable growth wherever possible. One of my most significant initiatives involves 'integrated regenerative farming,' focusing on reforestation and carbon sequestration practises. By taking this initiative with my family, we aim to create a sustainable environment while improving the livelihoods of farmers and ourselves. The response has been encouraging, with many marginalised farmers joining us on this journey, and I am hopeful that our efforts will have a far-reaching impact.

To maintain my well-being and stay energised, I prioritise physical fitness through regular visits to the gym and practising yoga. Keeping myself active and rejuvenated enables me to remain committed to making a positive difference in the world. ♦♦



# EMPOWERING CREATIVITY: HOW AI IS ENHANCING THE MARKETERS?

In 2021, a game-changing survey by Semrush unveiled a remarkable revelation about the use of AI in the marketing world. While marketers ranked sixth in AI usage, it was astonishing to learn that marketing and sales departments actually prioritised AI and ML more than any other department. This newfound emphasis on AI could be the key to transforming mere desires into tangible achievements.

The survey brought to light some compelling statistics that showcase the impact of AI on marketing. An overwhelming 48% of marketing leaders acknowledged that AI made the most significant difference in how customers interacted with their brands. Additionally, 64% of B2B marketers recognised the immense value of AI in their marketing strategies, acknowledging its power to drive success, as per the same report.

As we gaze into the future, it becomes evident that AI is set to become an integral part of marketing strategies. Even in 2020, 80% of marketers were already using chatbots

to enhance their customer experience. The fusion of AI and marketing promises to unleash a captivating synergy, one that will attract audiences and revolutionise the way businesses connect with their customers.

## Rise of the AI Wordsmiths

Content is an indispensable tool for marketers as it enables them to engage, inform, and connect with their target audience. Through various formats such as articles, blog posts, social media updates, and videos, content allows businesses to showcase their expertise, products, and brand identity. It helps build trust, credibility, and brand loyalty while also driving traffic and conversions. Well-crafted content can influence consumer decisions, foster meaningful interactions, and ultimately, drive business growth.

While historically a time-consuming and resource-intensive task, the content-creating landscape has evolved with the advent of AI-driven content generators, revolutionising the way marketers approach content creation.

Despite their effectiveness, some concerns have been raised about the potential for AI-generated content to lack authenticity and emotional depth. However, advancements in NLP and machine learning have significantly improved the quality of AI-generated content, making it increasingly difficult to distinguish between human-authored and AI-generated pieces.

### The major factors that contribute to this are:

#### ● Sentiment Analysis

For successful content, understanding audience reactions and emotions is crucial. This is where sentiment analysis, another AI-powered tool, comes into play. Sentiment analysis uses AI algorithms to analyse the emotions, opinions, and attitudes expressed in written or spoken language. By gauging the sentiment of the audience towards a particular piece of content or marketing campaign, businesses can adapt their strategies accordingly.

Sentiment analysis not only provides insights into the effectiveness of current campaigns but also helps identify potential issues and areas for improvement. For example, if a social media campaign receives overwhelmingly positive feedback, a company can leverage this positive sentiment to reinforce brand loyalty. On the other hand, if the sentiment is negative, they can take prompt action to address the concerns and mitigate the impact on their reputation.

#### ● Personalisation Algorithms

Gone are the days of one-size-fits-all marketing campaigns. In the age of AI, personalisation is the key to successful content marketing. Personalisation algorithms use AI and machine learning to analyse user data and behaviour, enabling businesses to deliver highly relevant and tailored content to each individual user.

One of the most common applications of personalisation algorithms is in product recommendations. E-commerce platforms leverage AI to analyse user browsing history, purchase behaviour, and preferences to suggest products that align

with the individual's interests. This not only enhances the user experience but also increases the likelihood of making a sale.

#### ● AI-Powered Analytics

AI has also transformed marketing analytics, making it more sophisticated and insightful than ever before. Traditional analytics tools provided valuable data, but AI-powered analytics takes it to the next level by offering predictive insights and actionable recommendations.

AI-driven analytics can identify patterns, trends, and correlations in vast datasets, providing marketers with a comprehensive understanding of their audience's behaviour. This information can be used to refine content marketing strategies, optimise content distribution channels, and identify opportunities for growth.

### Ethical Considerations of AI in Content Marketing

While AI offers immense potential for enhancing content creation and marketing, there are ethical considerations that need to be addressed. The use of AI-generated content raises questions about transparency and authenticity. Consumers have the right to know if they are interacting with AI-generated content and not real human authors.

The integration of AI technology in content creation and marketing holds great promise, streamlining processes and enabling personalisation at scale. However, ethical considerations cannot be overlooked. Transparency is paramount to maintaining consumer trust, and businesses must disclose the use of AI-generated content clearly.

Addressing bias in AI algorithms is equally vital to avoid perpetuating harmful stereotypes and discrimination. Investing in diverse datasets and rigorous validation procedures will help ensure that AI is harnessed responsibly, empowering marketers to create impactful, authentic, and inclusive content that resonates with their audiences while upholding ethical principles. By striking this delicate balance, businesses can fully harness the potential of AI in content creation without compromising ethical integrity. ♦



*Extraordinary Leadership in  
Intelligent Document Processing*

# VENKATESH PAGIDIMARRI

*Co-Founder & Chief AI Officer,  
Foundation AI*



AI is the game-changer, revolutionising industries and fuelling innovation," declares Venkatesh Pagidimarrri, the co-founder & chief AI officer of Foundation AI. With an illustrious career spanning over 15 years, Venkatesh has honed his expertise in data science, machine learning, and artificial intelligence, specialising in delivering powerful solutions for organisations across multiple industries.

In a bold move in 2012, Venkatesh co-founded Enlightiks and unleashed Querent, a groundbreaking AI platform that seamlessly processed nearly 30 million medical records. The phenomenal success of Querent caught the attention of industry giants, leading to its acquisition by Practo in 2016 and propelling Venkatesh's entrepreneurial journey to new heights. As the visionary Chief AI Officer of Foundation AI since 2018, Venkatesh has steered the development of Foundation AI's intelligent document processing solution. His prowess in computer vision and natural language processing is indisputable, evident in his extensive academic publications and captivating industry presentations.

With both a master's and a bachelor's degree from the prestigious IIT Madras, Venkatesh's academic background solidifies his position as an exceptional professional in the realm of artificial intelligence. Driven by an unwavering vision, Venkatesh envisions Foundation AI as the vanguard of AI-powered solutions for intelligent document processing. With an unwavering commitment to excellence, the company strives

to cater to a diverse range of industries, including legal, insurance, and healthcare.

TradeFlock caught up with Venkatesh to delve deeper into his remarkable leadership and unwavering expertise in the dynamic AI industry. In this exclusive interview, he unveiled his secrets to unlocking new potential and shared his captivating journey through the ever-evolving world of AI.

## **How do you contribute to the academic community in the field of AI?**

I actively share my expertise and insights by publishing papers in computer vision and natural language processing. I have also represented Practo by presenting a paper on computer vision for a healthcare use case. By bridging the gap between AI technology and practical business applications, I aim to contribute to the academic community's understanding and advancements in the field.

## **What drives your passion for building large-scale AI products?**

My passion lies in building products that provide actionable insights for businesses. I believe that AI has the power to transform industries and improve decision-making processes. By creating large-scale AI products, I aim to fuel business growth and help organisations leverage AI for their benefit.

**What are the key goals and milestones you envision for Foundation AI in the coming years?**

Foundation AI aims to become a leading provider of AI-powered solutions for intelligent document processing. We plan to cater to various industries, including legal, insurance, and healthcare. Our goal is to continuously enhance our platform by incorporating cutting-edge AI technologies and refining our capabilities for processing and extracting insights from unstructured data.

**How does Foundation AI plan to achieve growth and establish partnerships?**

We plan to expand our client base and establish strategic partnerships with organisations that can benefit from our AI solutions. By delivering high-quality and reliable solutions, we aim to be recognised as a trusted partner in the industry. We will continue hiring talented professionals with expertise in AI and machine learning, particularly in computer vision, natural language processing, and large language models. Their contributions will be instrumental in developing and improving our products and services to meet the specific needs of different industries.

**According to you, what qualities should the best data scientists possess?**

The best data scientists should have a combination of technical expertise, problem-solving skills, and the ability to apply AI techniques to real-world challenges. They should have a deep understanding of AI technologies, algorithms, and statistical modelling, supported by a strong mathematical and analytical background. Curiosity, a drive for continuous learning, and effective communication skills are also crucial for conveying findings and insights to stakeholders.

**How do you approach managing AI teams and fostering a people-focused environment?**

In the demanding field of AI, being people-focused is essential for building successful AI teams. People-focused decisions include attracting top talent, fostering skill development, promoting collaboration, ensuring employee well-being, recognising contributions, and providing effective leadership. I believe in continuous skill development and training programmes to keep up with the rapidly evolving AI field. By creating a learning culture through workshops, conferences, and training sessions, we can attract and retain top talent while encouraging innovation within the team.

**What role do effective collaboration and communication play in building large AI teams?**

Effective collaboration and communication are crucial for building large AI teams. Creating an environment that encourages open dialogue, knowledge sharing, and cross-functional collaboration fosters innovation, synergy, and a sense of belonging within the team. Regular team meetings, agile methodologies, and collaboration tools facilitate communication and coordination, ultimately driving successful outcomes.

**What is your outlook on the future of AI in the intelligent document processing industry?**

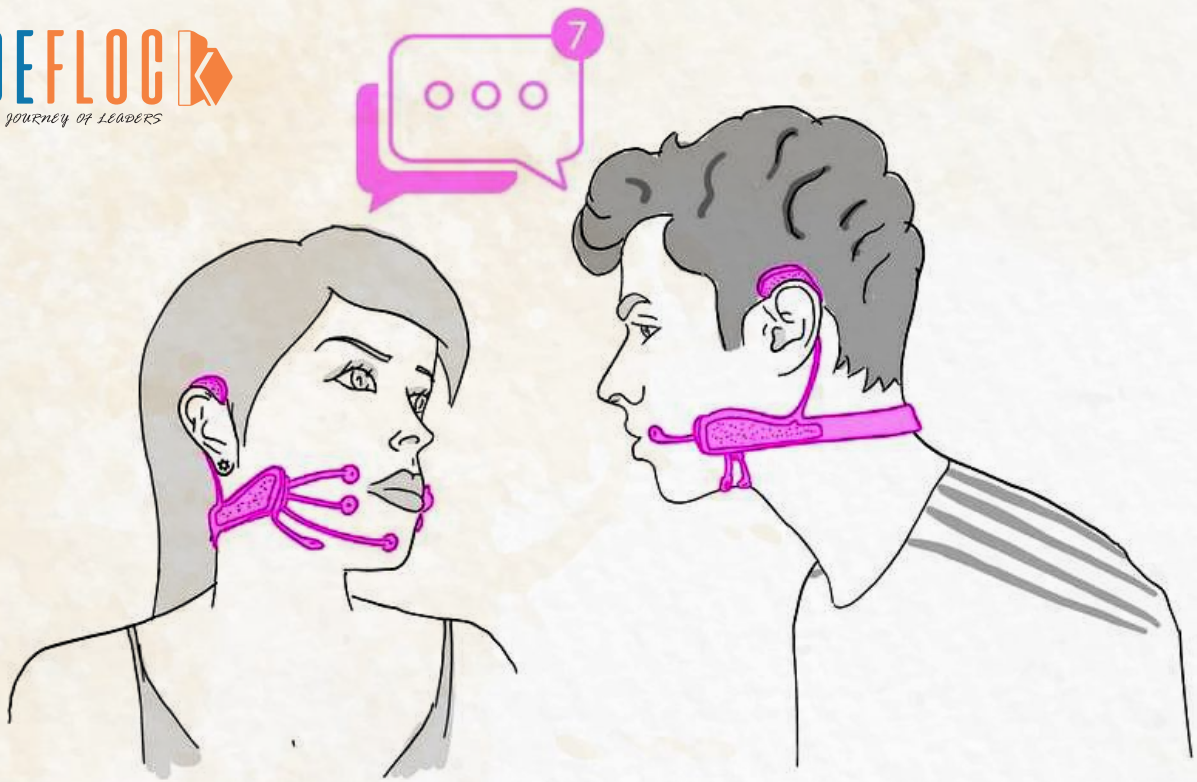
I have great optimism for the future of AI in the intelligent document processing industry. Advancements in AI technologies, coupled with the increasing demand for automation and digital transformation, will drive innovation and reshape how organisations process, analyse, and leverage document information. AI-powered IDP systems will streamline operations, improve decision-making, and enhance overall efficiency and productivity across various industries.

**How will AI-powered intelligent document processing solutions cater to industry-specific needs?**

Various industries, including legal, healthcare, and insurance, possess distinctive document processing requirements and compliance rules. Customised AI technologies will cater to these needs, offering specialised solutions for intelligent contract analysis, medical records processing, fraud detection, and regulatory compliance checks. AI-driven Intelligent Document Processing (IDP) solutions will play a vital role in tackling industry-specific challenges and enhancing operational efficiency. We are actively expanding our teams in the rapidly advancing field of Generative AI and LLM to stay at the forefront of innovation.

**What qualities and achievements position you as a highly respected leader in the field of AI?**

My accomplishments, technical expertise, and dedication to building impactful AI solutions have contributed to my reputation as a respected leader in the field. My strong understanding of AI technologies, algorithms, and statistical modelling, combined with insights into business strategies, enables me to create solutions that address real-world challenges. Through innovative products and partnerships, I consistently demonstrate effective collaboration skills and the ability to leverage existing infrastructure to create synergistic solutions. ♦



# ALTEREGO

## Can Technology Read Your Mind?

Over the past few years, various industries have witnessed remarkable strides in technology.

We have witnessed the transformative potential of advancements, such as using smartphones to control household appliances and relying on voice assistants like Alexa and Siri for information retrieval. However, can you fathom a device surpassing our current capabilities, one that intuitively caters to our needs by just interpreting our thoughts?

The mere idea sounds astonishing, right?

Well, then meet Arnav Kapur, born in Delhi and currently studying at MIT. With his brainchild, AlterEgo, which enables seamless communication with machines and humans sans speech or gestures, he has shocked everyone out there, including the major tech fanatics.

Being a visionary inventor and explorer, Arnav has an insatiable curiosity for science, maths, and arts. Currently pursuing a PhD in Media Arts and Sciences at MIT, Cambridge, Massachusetts, his accomplishments include a 3D printable drone, a platform for gene expression measurement, and Drishti, a device aiding the visually impaired.

Other than being part of a lunar rover project that aims to transmit images from the moon to Earth, Arnav's achievements include co-

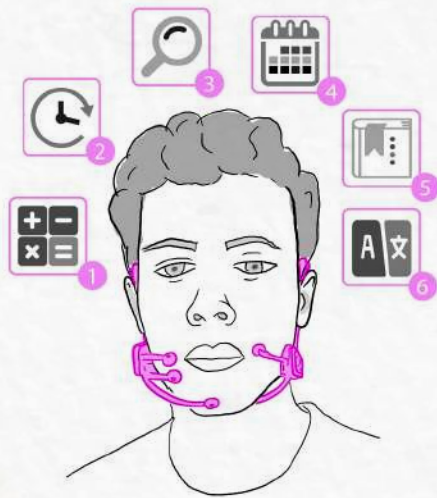
developing a captivating art installation showcased at the Tate Modern and the alt-AI conference. Arnav has a robust belief in combining disciplines to find innovative solutions to global challenges, and AlterEgo is the prominent result of that only!

### The Mind-to-Machine Communication

Introduced in 2018 by Arnav, AlterEgo unveiled a prototype that would change the way we communicate with machines and humans. This cutting-edge device offers users the extraordinary ability to interact through the mere articulation of thoughts and words within the confines of their minds, ensuring absolute privacy in a world where surveillance and intrusion often feel inescapable.

MIT, the institution that houses Arnav's ingenious mind, describes AlterEgo as a non-invasive, wearable, peripheral neural interface that seamlessly bridges the gap between humans and machines. By simply thinking and mentally forming sentences, one can engage in natural language conversations with AI assistants, services, and even other people. No need for vocal cords to vibrate or lips to move; it's an internal dialogue that expands the boundaries of human-machine interaction.





| Mechanism                  | Description   |
|----------------------------|---|
| Device Type                | Non-invasive, wearable, peripheral neural interface   |
| Communication Method       | Internal articulation of words  |
| Interaction Abilities      | Conversing with machines, AI assistants, services, and people through thoughts and internal speech                                      |
| User's Auditory Perception | Feedback via audio through bone conduction, maintaining normal auditory experience  |
| Privacy and Discretion     | Communication occurs entirely within the user's mind, no observable actions or external movements are required                          |
| Unique Feature             | Utilizes bone conduction technology for seamless transmission and receipt of information  |
| Applications               | Enhancing human-computer interactions, aiding individuals with speech impairments, revolutionising communication with technology and AI |

In a viral video posted on an Instagram handle showcasing AlterEgo's prowess, we witness Arnav donning the device while being interviewed. Without a word leaving his lips, he promptly responds to each question thrown his way, leaving the interviewer astounded. "You have the entire internet in your head," the interviewer exclaims in amazement, encapsulating the wonder of this revolutionary creation.

The secret behind this seamless communication lies in the device's ability to capture peripheral neural signals activated during the user's internal articulation of words. Through this intricate process, the user can transmit and receive information to and from machines or individuals, all without any observable actions, making it a discreet and unintrusive form of interaction.

AlterEgo's brilliance lies not only in its function but also in its design. Harnessing the power of bone conduction technology, the device establishes a closed loop of conversation, providing feedback to the user through audio without disrupting their normal auditory perception. It's like having a private dialogue with a digital companion, akin to speaking to oneself, but with the added ability to communicate with the world around you.

### Voice of Tomorrow

AlterEgo can certainly be considered a revolutionary development with a noble purpose. It seeks to empower those who face speech-related difficulties, such as individuals battling ALS and MS. As Arnav justifies, communication is a fundamental human right, and by offering a seamless integration of computing into their lives, AlterEgo serves as a beacon of hope.



Beyond being a mere technological marvel, AlterEgo has the potential to become an indispensable second self, augmenting cognition and abilities. This is a step towards a more inclusive society, where individuals can fully participate and contribute, irrespective of their physical limitations.

While some may view AlterEgo as a mere gadget, it's important to recognise its profound impact on humanity. It elevates the lives of those often marginalised by society and empowers them to express their thoughts and needs independently. Such innovations, driven by empathy and understanding, represent the best of human ingenuity. As we embrace AlterEgo, we take a leap towards a more compassionate world. ♦♦

# BATTLING SOPHISTICATED THREATS IN AN AGE OF AUTOMATION

In today's hyper-connected world, where technology reigns supreme, the battle between cyber security experts and malicious actors has intensified to a new level. As cyber threats become increasingly sophisticated, it is evident that the future of cyber security lies in harnessing the power of AI. The marriage of AI and cyber security brings forth unparalleled opportunities to defend against complex attacks and safeguard our digital realms.

As per the reports by AAG IT Services, in H1 2022, a staggering 236.1 million ransomware attacks globally highlighted the urgency for robust cyber security measures to protect against evolving digital threats. These attacks have not only wreaked havoc on individuals but have also disrupted critical infrastructure, national security, and economic stability. As threat actors become more organised and innovative, traditional security measures alone fall short in providing effective defense.

AI, however, has emerged as a formidable ally in the fight against cyber threats. Machine learning algorithms possess the unique ability to analyse vast datasets in real-time, enabling them to recognise patterns and anomalies that might go unnoticed by human operators. By continuously learning from past incidents and adapting to new attack vectors, AI-driven cyber security systems can rapidly detect and thwart even the most sophisticated attacks.

One of the primary benefits of AI in cyber security is its ability to neutralise zero-day exploits. These previously unknown vulnerabilities are a hacker's dream, providing them with an entry point into a system before a patch is developed. AI-powered intrusion



Editor's Pick

detection systems can preemptively identify and mitigate these threats, thereby reducing the window of opportunity for attackers.

## The Unstoppable Synergy of AI and Human Expertise

Critics argue that AI also presents risks, as attackers could potentially leverage AI for their malicious intents. While this is a valid concern, it should not overshadow the benefits that AI brings to cyber security. As technology evolves, countermeasures can be developed to address AI-generated threats effectively.

The synergistic alliance between AI and cyber security is crucial in our battle against sophisticated threats in the age of automation. The statistics leave no room for doubt; cyber-attacks are on the rise and are becoming increasingly sophisticated. AI provides a potent defense mechanism, capable of outsmarting and outpacing attackers by learning from the past and adapting to the future. To remain secure in the digital era, embracing AI-driven cyber security solutions is no longer a choice but a necessity.

As we continue to invest in and refine AI's capabilities, it is essential to strike a balance between innovation and ethical considerations. The collaboration between human expertise and AI augmentation will undoubtedly define the future of cyber security, ensuring a safer digital environment for generations to come. ♦

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