SOHONG DHAR
BUILDING INTELLIGENT SYSTEMS ROOTED IN HUMAN UNDERSTANDING

Kaushal Kumar | The CEO Magazine

We live in an era where data and technology shape every aspect of society, but only a handful of experts can truly bridge the gap between complex science and human-centered innovation. Sohong Dhar is one such professional. Trained at Jadavpur University, IIT Madras, and Duke University, he combines data science, computational linguistics, and cybersecurity to develop intelligent, socially responsible systems. His work, recognised through multiple patents and collaborations with leading organisations like Google Brain and Microsoft Azure, reflects a commitment to applying rigorous analysis to solve real-world problems.

REDESIGNING INFORMATION

Sohong's professional path reflects an uncommon blend of intellectual depth and technical agility. Beginning with a foundation in library and information science, he transitioned into data science, inferential statistics, and machine learning. "I transitioned from organising information to decoding both human and algorithmic behaviour," he explains.

His collaborations with Microsoft Azure, Google Brain, and C-Voter span a wide range of initiatives, from political sentiment modelling to digital health behaviour and algorithmic bias detection. Along the way, he secured multiple patents, including a UK design patent for a cybercrime analytical computer and a CNN-based career forecasting tool. These innovations reflect his commitment to building systems that are both intelligent and interpretable, at the same time inclusive and socially responsive.

DEFINING IMPACT ACROSS DISCIPLINES

Sohong's journey is marked by innovations that span both academic

SOHONG DHAR
Data Scientist

research and applied technology. He holds a first-class Master's in Library & Information Science and pursued advanced degrees in Data Science at IIT Madras and research at Duke University's Pratt School of Engineering. His credentials further include certifications from DAMA International (CDMP), ASQ Six Sigma Black Belt, Microsoft, and Google Cloud. His research spans from classical Hindu Dharmashastra interpreted through computational linguistics to advanced NLP and sentiment analysis.

His most defining milestone is his patent on Intelligent Swarm Robotics for Power Transmission Line Maintenance. Equally noteworthy are his international patents: one from the UK for a cybersecurity architecture model and another from India using machine learning to analyse student behaviour in mathematics education.

His research has found global platforms, including Springer's ICANTCI 2024 and the IEEE GINOTECH 2025, where he presented breakthroughs in real-time threat detection and automated feedback systems in higher education. Professionally, he has contributed as an Information Scientist at Google Brain and

a Visiting Fellow at C-Voter, integrating advanced analytics into real-world systems.

LOOKING AHEAD

Sohong sees the future of cybersecurity moving toward autonomous, AI-driven systems capable of real-time threat detection, adaptive response, and secure model operations. Given the rise of quantum computing and AI, he emphasises the need for quantum-resilient encryption and responsible MLOps practices.

He is also actively working on uncovering unconscious bias in search algorithms using behavioural data and algorithmic audits. Another key project involves developing an "information acceleration" model, which explores how information asymmetry drives market volatility. "By merging behavioural data with economic logic", he explains, "we can better model real-world decision-making under uncertainty."

Both initiatives are part of his larger goal to influence digital policy through data-driven design and mechanism frameworks. "Whether in public governance or cybersecurity, my focus remains the same: building intelligent systems that adapt responsibly and serve the public good," says Sohong

LEADERSHIP MANTRA

For aspiring professionals, Sohong advocates for grounding oneself in the theory of mathematics, computation, and cognition. He believes lasting innovation arises from understanding how algorithms align with the architecture of human thought. Influenced by thinkers like Pānini and von Neumann, he champions a multidisciplinary lens that respects both logic and lived experience. His message is clear: build systems that are not just intelligent but also intellectually honest and deeply human-aware.