

Karthik Nakkeeran's Biography

കർത്തിക നാക്കീരൻ

Karthik Nakkeeran is a leading figure in data science and a distinguished innovator in Digital Health AI, with over 18 years of experience. He specializes in developing cutting-edge, patented Machine Learning and Generative AI solutions that are making significant strides in healthcare. Currently, Karthik is employed at Abbott, a global health company, where he plays a crucial role in shaping the AI and Machine Learning strategy for the Lingo bio-wearable Continuous Glucose Monitor (CGM) mobile application. His innovative approach has led to the development of several groundbreaking features within the app, including real-time detection of glucose spikes, Generative AI-assisted food logging, and interactive wellness coaching. These advancements are designed to empower individuals to manage their metabolic health and diabetes actively, thereby improving their quality of life.

Karthik's recent work in architectural design for a machine learning-driven glucose spike detection system has resulted in a pending U.S. patent, highlighting his commitment to pushing the boundaries of technology for health management. His impressive track record in the digital health sector is complemented by a rich background at SAS Institute Inc., where he spent over a decade advancing analytical technologies. During his tenure there, he developed a patented Deep Learning and Optical Character Recognition (OCR) pipeline that enabled automated document vision. This technology has become a benchmark in the industry, receiving recognition from prominent companies such as Intuit, Oracle, and Accenture.

Furthermore, Karthik led the implementation of sophisticated demand-driven planning and optimization analytics for some of the world's largest fast-moving consumer goods (FMCG) companies, including industry titans like Nestlé, Hershey's, and Kellogg's. His work in these

areas has enabled companies to enhance their operational efficiency and improve their supply chain management.

Karthik's technical expertise is comprehensive, spanning advanced areas such as AI frameworks, Large Language Models (LLMs), Computer Vision, and Time Series modeling. He is also an accomplished scholar, having authored multiple peer-reviewed publications covering a wide array of topics, from applications of computer vision in manufacturing to multimodal continuous monitoring systems for detecting diabetic ketoacidosis.

In recognition of his significant contributions to the field, Karthik has received numerous awards and honors. He is a Fellow of the Institute of Analytics (FIoA), a Full Member of the Sigma XI Scientific Honor Society. He has garnered accolades such as the 2025 Claro Award for Tech Excellence and the Aureum Technology Award for Innovation. He holds a Master's degree in Management Information Systems from Oklahoma State University. He is currently pursuing a Ph.D. in Information Technology with a focus on Artificial Intelligence at the University of the Cumberlands, where he maintains an exceptional 4.0 GPA.

Beyond his professional achievements, Karthik is deeply committed to community service. As a proud father of two, he passionately dedicates his time to mentoring young athletes as a volunteer youth tennis coach, instilling important values of teamwork, discipline, and resilience in the next generation. His balance of professional excellence, academic ambition, and community involvement exemplifies his dedication to making a positive impact in both the field of digital health and his local community.