

Biography: Raj Thaker, Senior Member IEEE, Full Member Sigma Xi

Raj Thaker is a distinguished technical leader and researcher currently serving as an **AI Infrastructure Architect at Google**, where he leads the architectural scaling of distributed systems that support **billions of users**. With a career defined by the "Science of Interoperability," Thaker bridges the gap between foundational academic research and industrial-scale deployment, ensuring that global AI platforms remain resilient, ethical, and grounded in research integrity.

Thaker's research career began a decade ago at the University of Southern California's Institute for Creative Technologies. There, he served as a key contributor to the **SuperGLU (Super Generalized Learning Utilities)** framework - a project of **Major Significance** funded by the U.S. Department of Defense. His work on messaging and gateway services provided the technical realization for interoperability standards that were later adopted by the U.S. Army Research Laboratory (ARL) in their *Design Recommendations for Intelligent Tutoring Systems* (Volume 7). By solving the "interoperability silo," Thaker's research enabled diverse pedagogical agents to function as a unified, scalable ecosystem, establishing a national-level standard for distributed learning systems.

At Google, Thaker applies these same scientific principles to the move toward **Agentic Infrastructure**. His work focuses on the "invisible plumbing" of modern AI - ensuring that sophisticated models can communicate and scale safely within a global enterprise ecosystem while maintaining strict ethical guardrails.

Beyond his architectural leadership, Thaker is a recognized **International Juror** and technical authority. He recently completed the evaluation of **50 global AI innovations** as an expert juror for the **2026 Globee AI Awards**. He was also selected as part of a restricted cohort of experts from nearly 500 applicants to judge **LA Hacks 2026 at UCLA** - Southern California's largest hackathon—and serves as a technical judge for the **Google Vibe Code for Gold** hackathon.

His professional standing is recognized by the world's most prestigious scientific and technical bodies. Raj is an **officially elevated Senior Member of the IEEE**, a distinction reserved for the **top 10%** of the world's largest technical society. As a **Full Member of Sigma Xi**, he belongs to an international community that has included over 200 Nobel Prize winners. Furthermore, he is currently a candidate for **Fellowship of the IET (FIET)**, the highest professional engineering grade in the United Kingdom, and is an **ACM Certified Reviewer** for flagship journals including *Transactions on Autonomous and Adaptive Systems* (TAAS) and *Intelligent Systems and Technology* (TIST).

Thaker's journey has been profiled by major international trade media, with a forthcoming career feature in **IET Member News** scheduled for **July 7, 2026**. He remains committed to the Sigma Xi mission of fostering research excellence, seeking to contribute his unique perspective on industrial-scale interoperability and research integrity to help define the standards for the next generation of scientific leadership.