

SANJAY RANKA

Computer Science Expert Witness

Distinguished Professor, University of Florida | Former CTO, Paramark | IEEE & AAAS Fellow
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SUMMARY

Expert witness in patent litigation and complex technology disputes involving distributed systems, cloud infrastructure, machine learning, AI, and computer vision systems, data platforms, GPU-accelerated computing, and high-performance software architectures. Particularly well suited for matters where real-world system behavior, performance constraints, or implementation details must be compared against patent claims, technical specifications, source code, or opposing expert opinions. Combines decades of academic research with hands-on industry experience building and operating large-scale, fault-tolerant production systems. Services include early case assessment, claim construction and Markman support, infringement and invalidity analysis, IPR/PTAB expert reports, rebuttal analysis, and deposition and trial testimony.

AREAS OF EXPERTISE

Distributed systems and cloud computing • Large-scale software platforms and data pipelines • Machine learning, artificial intelligence, and computer vision systems • GPU-accelerated, parallel, and high-performance computing (CUDA-based environments, distributed GPU systems) • System performance, scalability, latency, throughput, and fault tolerance • Technical analysis of architecture, implementation, and real-world system behavior

LITIGATION EXPERIENCE

- More than 15 expert reports and declarations across federal district courts, the PTAB, and the USPTO
- Deposition and trial testimony, including federal jury trial testimony (800 Adept v. Murex Securities, M.D. Fla.)
- Experience in claim construction, technical infringement and invalidity analysis, and rebuttal work
- Experience on both plaintiff and defense sides in patent litigation and IPR proceedings

REPRESENTATIVE CASES

Representative engagements include:

2025 Tesla v. Intellectual Ventures — IPR, Expert Report

2024 Freewheel Media v. AlmondNet — IPR, Expert Reports, Depositions

2023 Hayden AI v. SafeFleet Holdings — E.D.N.Y., Expert Report, Deposition

2021 Google v. MindbaseHQ — IPR, Expert Reports, Depositions

2008 USPTO Patent Reexamination — Expert Reports, Hearing

2002 800 Adept v. Murex Securities — M.D. Fla., Expert Report, Deposition, Jury Trial

PROFESSIONAL BACKGROUND

Academic — Distinguished Professor of Computer Science, University of Florida. Author of 350+ peer-reviewed publications and inventor on 13 U.S. patents. Principal Investigator or co-Principal Investigator on more than \$20 million in federally funded research from NSF, NIH, DOE, NNSA, and DOT. Advised more than 50 doctoral students, many now in leading technology roles. Leadership roles include Program Chair and Conference Chair for major IEEE and ACM conferences.

Industry — Former CTO and co-founder of Paramark, where he built and operated a large-scale ad-serving optimization platform in the programmatic advertising ecosystem. Industry experience includes real-world distributed systems, optimization platforms, production infrastructure, and patented advertising technologies, including inventions later associated with Google's portfolio.

Distinctions — IEEE Fellow • AAAS Fellow • Distinguished Alumnus, IIT Kanpur • IEEE Technical Committee on Cloud Computing Research Impact Award (2020) • Ph.D. in Computer Science