MICHAEL RECCHIA

EXECUTIVE TECHNOLOGY LEADER | NETWORK & SOFTWARE ENGINEERING • AI • 2G–6G • CLOUD/EDGE

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EXECUTIVE PROFILE

Executive technology leader, principal scientist and engineer specializing in artificial intelligence, 5G/6G, AI-RAN, O-RAN, cloud/edge computing and advanced network architecture. Creates new technologies, leads advanced engineering organizations and translates emerging research into deployable telecommunications, enterprise and government systems.

CURRENT TECHNOLOGY FOCUS

ARTIFICIAL INTELLIGENCE Human Learning Model (HLM) • Generative AI • AI-RAN • AI network automation • Media forensics

WIRELESS / RAN 2G–6G • O-RAN • RIC • Network slicing • vCU/vDU/vRU • mmWave

CLOUD / EDGE OpenShift • AWS • MEC • REC • NFV • Containers • Akraino

ENGINEERING Network architecture • OSS • Systems engineering • Python • C++ • C • C# • Network programming

EDUCATION & CURRENT RESEARCH

MS, Computer Science, Software & Network Engineering — Stevens Institute of Technology

BS, Computer Science & Communications — Rutgers University | Minors: Electrical Engineering, Economics, French

Certified AWS Cloud Practitioner

RECENT PROFESSIONAL EXPERIENCE

AdaptNet AI Labs | 2024-Present | CEO/CTO & Principal Scientist / Engineer

- Set company strategy and technical direction across next-generation computing, networking, AI and media forensics.
- Invented and developed a Human Learning Model (HLM) and lead development of AdaptOne, an AI platform based on the HLM approach.
- Develop AI-enabled networking and related use-case solutions using AdaptOne.

HLM technical paper: View technical paper

AdaptOne technical paper: View technical paper

Red Hat | 2020-2025 | Edge Architect

- Developed wireless cellular solutions for telecommunications, enterprise and government organizations using cloud-native and edge architectures.
- Virtualized baseband functions (vCU, vDU, vRU) on OpenShift, including O-RAN-aligned O-CU, O-DU and O-RU implementations.
- Created the Certified Network Blueprints concept to instantiate customer network use cases and applied the O-RAN RIC on OpenShift for AI-driven RAN optimization.

MITRE Labs | 2018-2022 | Senior Principal Cellular Engineer

- Designed and developed MITRE's first 5G Lab, integrating network slicing, Multi-Access Edge Cloud, Radio Edge Cloud and O-RAN.
- Worked with Virginia Tech on a 5G drone-service trial using network slicing and AI through the O-RAN RIC.
- Lead representative for O-RAN Working Groups 3 and 6; led 5G initiatives for Smart Cities, FBI applications and Smart Airports, including 5G-guided landing concepts.
- Held a Top Secret clearance for forward-looking government work.

Verizon Wireless | 2018 | Distinguished Member of Technical Staff

- Designed next-generation OSS architecture for 5G and beyond; integrated network slicing into enterprise virtual-network strategy.
- Led engineering for design and testing of Multi-Access Edge Computing and Radio Edge Cloud platforms.

ADDITIONAL HIGH-IMPACT EXPERIENCE

AT&T Labs & Bell Labs | Executive Director • Director • Lead / Distinguished Engineer

Networking Expert including 2G thru 6G, Layers 1 through 7

- Led advanced networking, systems engineering, software development, Tier 3/4 support and reliability organizations supporting cellular, transport and data networks.
- Developed the industry's first RAN Intelligent Controller (RIC) for AI-RAN and invented Akraino; expertise in ECOMP, NFV and containerized network platforms.

• Led AI development for automated network operations and network certification and established software-reliability best practices for production network software.

• Led engineering of UNIX operating-system releases and Bell Labs' version of IBM operating systems; served as lead network design engineer for the FAA Air Route Traffic Control system.

SELECTED INNOVATION & ADDITIONAL QUALIFICATIONS

• U.S. Patent: US20120087235 • IEEE software reliability publication: document 1021796.

• Leadership at CEO/CTO, Executive Director and Director levels; team building, coaching and mentoring.

• Languages: Italian and English fluent; French and Spanish academic proficiency.