

NAVNEET KUMAR TYAGI

Email: navneettyagi@ieee.org

PROFESSIONAL SUMMARY

Senior Software Engineer, Cloud Architect, Researcher, Author, Reviewer, Inventor, and Technology Leader with 19 years of experience in cloud computing, artificial intelligence, software engineering, enterprise architecture, and digital transformation. Demonstrated contributions to science and technology through peer-reviewed publications, books, patents, scholarly reviewing, conference leadership, invited speaking engagements, mentoring, and professional service. Recognized internationally for advancing AI-enabled systems, cloud-native architectures, and intelligent enterprise solutions.

CURRENT POSITION

Finance of America

Senior Software Engineer

- Architect and develop enterprise-scale cloud and AI-enabled solutions.
 - Lead modernization initiatives involving AI, cloud computing, APIs, and digital transformation.
 - Design secure, scalable, and compliant platforms for financial services applications.
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RESEARCH PUBLICATIONS

Google Scholar Profile

Google Scholar: <https://scholar.google.com/citations?user=V2IIIwAAAAJ>

First Author Publications

1. Research Publication (Google Scholar)
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ
2. Research Publication (Google Scholar)
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ

3. Research Publication (Google Scholar)
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
[view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)

Second Author Publications

1. Research Publication (Google Scholar)
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
[view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
2. Research Publication (Google Scholar)
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
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3. Research Publication (Google Scholar)
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
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Co-Author Publications

1. Research Publication
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
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2. Research Publication
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
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3. Research Publication
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
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4. Research Publication
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
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5. Research Publication
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
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6. Research Publication
[https://scholar.google.com/citations?](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)
[view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ)

7. Research Publication

https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ

8. Research Publication

https://scholar.google.com/citations?view_op=view_citation&hl=en&user=V2IIIwAAAAJ&citation_for_view=V2IIIwAAAAJ: FxGoFyzp5QC

Total Scholarly Publications: 14

Research Areas:

- Artificial Intelligence
- Machine Learning
- Cloud Computing
- Software Engineering
- Intelligent Systems
- Enterprise Architecture
- Financial Technology

BOOKS

First Author

AI-Driven Payments Modernization: Engineering Reliability and Compliance at Scale

Amazon Link: <https://www.amazon.com/dp/9347729086>

Co-Author

Explainable AI for Cloud Security Automation - Building Trustworthy Defenses

Amazon Link: <https://www.amazon.com/dp/8199000155>

PATENTS AND INTELLECTUAL PROPERTY

Co-Inventor

United Kingdom Registered Design

<https://www.registered-design.service.gov.uk/find/6483479>

German Patent / Intellectual Property Registration

<https://register.dpma.de/DPMAREgister/pat/register?AKZ=2020251056852&CURSOR=0>

SCHOLARLY ARTICLES AND THOUGHT LEADERSHIP

Forbes Technology Council

How to Build AI-Native APIs with Governance and Scalability

<https://www.forbes.com/councils/forbestechcouncil/2025/12/22/how-to-build-ai-native-apis-with-governance-and-scalability/>

How Financial Firms Can Modernize Legacy Systems Without Disrupting Core Operations

<https://www.forbes.com/councils/forbestechcouncil/2025/11/12/how-financial-firms-can-modernize-legacy-systems-without-disrupting-core-operations/>

From Cost Saver to AI Catalyst: The Cloud's Next Frontier

<https://www.forbes.com/councils/forbestechcouncil/2025/08/29/from-cost-saver-to-ai-catalyst-the-clouds-next-frontier/>

AI Journal

AWS and the AI Revolution: Unleashing the Next Wave of Intelligent Applications

<https://aijourn.com/amazon-web-services-aws-and-the-ai-revolution-unleashing-the-next-wave-of-intelligent-applications/>

Silicon Valley's Journal

Building Smarter Systems for an AI-First World: Infrastructure Intelligence in an Age of Automated Learning

<https://siliconvalleysjournal.com/2025/10/14/building-smarter-systems-for-an-ai-first-world-infrastructure-intelligence-in-an-age-of-automated-learning/>

CONFERENCE LEADERSHIP

Session Chair

Medical Informatics and Dynamic Environment (MIDE) 2026

Conference Website: <https://tipasasmartcity.org/mide/>

Responsibilities:

- Session moderation
 - Scientific discussion facilitation
 - Technical paper evaluation
 - Research community engagement
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INVITED SPEAKING ENGAGEMENTS

IEEE Computer Society Panelist

Topic:

FROM CLOUD-NATIVE TO AI-NATIVE: BUILDING AI-DRIVEN ARCHITECTURES WITH INTEGRATED CYBERSECURITY

Data & Analytics Summit 2026 Panelist

Topic:

AI Governance 2026: How Do You Stay Compliant When AI Moves Faster Than Regulators?

Applied AI Summit – Invited Speaker

Designing AI-First Lending Platforms: Patterns for Real-Time Decisions, Risk and Compliance

<https://appliedaisummit.org/designing-ai-first-lending-platforms-patterns-for-real-time-decisions-risk-and-compliance/>

World Congress on Smart Computing (WCSC 2026)

Talk:

AI-Native APIs: Enabling Smarter Cloud Architecture

PEER REVIEW AND EDITORIAL CONTRIBUTIONS

Journal Reviewer

- Data in Brief (DIB)
- Engineering Applications of Artificial Intelligence (EAAI)
- MethodsX

Conference Reviewer

- Microsoft Research Conference Management Toolkit (CMT)
- SCRS Conferences

Academic Service

- SCRS Fellow Membership Assessor

Technical Book Reviewer

- Azure Security
 - Data Engineering with AWS
 - Windows Server 2025 on Azure
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LEADERSHIP, JUDGING, AND MENTORING

Forbes Technology Council

Member Leader – Enterprise Architecture Group

- Leading a community of 122 active technology professionals.
- Facilitating collaboration and knowledge sharing in enterprise architecture and emerging technologies.

International Judge and Mentor

- HackMIT

- HackRice
 - HackUnited
 - CodeCrunch
 - Startupbootcamp
 - The Knowledge House (TKH)
 - Global Mentorship Initiative (GMI)
 - Conrad Challenge
 - Congressional App Challenge
 - Topmate (Top 1% Mentor)
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AWARDS AND HONORS

- Emerging Leader of the Year in Cloud and AI (2025)
- Global Recognition Award (2025)

Awards Judge

- Globee Awards
 - Claro Awards
 - Business Intelligence Group Awards
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PROFESSIONAL MEMBERSHIPS

- IEEE Senior Member
 - IETE Fellow Member
 - ACM Member
 - AAAI Member
 - Forbes Technology Council Member
 - SCRS Fellow
 - Forbes Expert Panelist
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RESEARCH INTERESTS

- Artificial Intelligence
- Machine Learning
- Cloud Computing
- AI Governance
- Enterprise Architecture
- Intelligent Systems
- Digital Transformation
- Responsible AI

- Financial Technology
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SUMMARY OF SCIENTIFIC CONTRIBUTIONS

- Author/co-author of 14 peer-reviewed research papers.
- Published author of technical books.
- Co-inventor on international intellectual property filings.
- Reviewer for leading journals and conferences.
- Session Chair and invited speaker at international conferences.
- International hackathon judge and mentor.
- Contributor to advancing AI, cloud computing, enterprise architecture, and intelligent systems through research, publication, innovation, and professional service.