

Mehdi Imani

📍 Tehran, Iran ✉ mehdiimaani@gmail.com 🎓 Google Scholar: Mehdi Imani 🔗 mehdi-imani-567aa0226

Summary

Consistently high-performing M.Sc. Computer Engineering student at Khatam University with an excellent academic record (GPA: 3.68/4.0) and national recognition through **IEEE Best Paper Award** and **IEEE Best Presentation Award** (2024, 2025). Demonstrates a robust research track record with **6 publications**, focusing on **AI** and **Industrial Internet of Things (IIoT)** applications. Over two years of **professional experience** as a **Network Administrator** and **IT Consultant**, delivering **advanced network** and **data protection solutions** for major clients, including *Iran Insurance Company* (Iran's largest insurance corporation). Expertise spans AI, Network Administration, and Data Analytics, with proficiency in **Veritas NetBackup**, **VMware vSphere**, and **Python**. Driven to advance **smart manufacturing** and **educational technologies** through innovative AI solutions.

Education

- M.Sc.** Computer Engineering, Software, Khatam University, Tehran, Iran 2023 – 2025
 University ranked 6th among Iran's 269 non-governmental universities by the Islamic World Science Citation Center (ISC) in 2025. Grad. date: Sept. 2025
- Thesis: *Design of Efficient Machine Learning Framework for Modelling Steel Casting*
 - GPA: 3.68 (out of 4.0), 17.57/20.00
- B.Sc.** Computer Engineering, Islamic Azad University, Iran 2019 – 2023
 University **ranked 2nd** among **Best Global** Universities in Iran and 403rd among Best Global Universities in World by the **U.S.News** in **2025**.
- GPA: 3.38 (out of 4.0), 15.88/20.00

Publications

Journal Articles

1. **M. Imani**, A. Imanifard, B. Majidi, and A. Shamisa, "Dashboard-Driven Machine Learning Analytics and Conceptual LLM Simulations for IIoT Education in Smart Steel Manufacturing," *International Journal of Web Research*, Vol. 8, no. 3, p. 15-31, Summer 2025, doi: [10.22133/ijwr.2025.521822.1280](https://doi.org/10.22133/ijwr.2025.521822.1280) 🔗.
2. **M. Imani**, A. Imanifard, B. Majidi, and A. Shamisa, "AI-Integrated Vocational Education and Workforce Reskilling for Steel Industry 4.0," *International Journal of Research and Technology in Electrical Industry*, Vol. 4, no. 2, July 2025, doi: [10.48308/ijrtei.2025.239941.1088](https://doi.org/10.48308/ijrtei.2025.239941.1088) 🔗.
3. **M. Imani**, A. Imanifard, B. Majidi, and A. Shamisa, "SustainableEnergyAgent: Reduction of Natural Gas Consumption for Sustainable Energy Management in Smart Steel," *In Preparation — Analysis and Drafting*, 2025.
4. A. Imanifard, **M. Imani**, and B. Majidi, "RecomPath: An LLM-Empowered Multi-Agent-based Framework for Intelligent Learning and Research Path Recommendation for Academic Advantage in Competitive Education Market," *In Preparation — Analysis and Drafting*, 2025.

Conference Proceedings

1. **M. Imani**, A. Imanifard, B. Majidi, and A. Shamisa, "Applications of Large Language Models in Industrial Internet of Things Education," in *2025 11th International Conference on Web Research (ICWR)*, 2025: *IEEE Xplore*, doi: [10.1109/ICWR65219.2025.11006194](https://doi.org/10.1109/ICWR65219.2025.11006194) 🔗. [**Selected Paper Award**]
2. **M. Imani**, A. Imanifard, B. Majidi, and A. Shamisa, "Improving Energy Consumption and Environmental Impact of Steel Manufacturing using Smart Cyber Physical Systems," in *2024 14th International Smart Grids Conference (SGC)*, 31 Dec. 2024-1 Jan. 2025, 2025: *IEEE Xplore*, doi: [DOI: 10.1109/SGC64640.2024.10983433](https://doi.org/10.1109/SGC64640.2024.10983433) 🔗. [**Best Presentation Award**]

Professional Experience

• Chief Executive Officer (CEO)

- **Lead strategic direction** and overall operations of Raybod, a leading provider of IT infrastructure, network safety, and data protection solutions for high-profile clients in Iran.
- **Oversee business development**, client relationships, and expansion into new markets while maintaining excellence in service delivery.
- **Drive innovation** in backup/recovery, and digital transformation services for industries including banking, insurance, and manufacturing.

Raybod,
Tehran, Iran
Nov. 2025 – present

• IT Consultant

- **Provided IT consulting** for a rug manufacturing factory, enabling **real-time data connectivity** between the Tehran office and factory site through **network topology upgrades**.
- **Upgraded virtualization infrastructure** using **VMware ESXi** to enhance system performance and scalability.
- **Managed Domain Controller** for centralized authentication and **implemented Symantec antivirus** for robust endpoint security.
- **Configured VPN protocols** to enable secure remote access for out-of-office operations.
- **Led key IT projects**, including:
 - *Negin Rose Sepahan Complex*, **Veeam Backup Setup**, Aug. 2024
 - *Negin Rose Sepahan Complex*, **MikroTik Tunnel Design and Upgrade**, Sept. 2024

Neginrose Sepahan,
Tehran, Iran
Jan. 2024 – present

• IT Consultant

- **Provided IT consulting** for an import/export company specializing in base food materials, supporting a **sales team of over 10** with critical internet, telephone, and mail services.
- **Designed and implemented redundant systems** for internet connectivity, **VOIP (FreePBX)**, and mail services to ensure stable and uninterrupted operations.
- **Deployed PfSense firewalls** to enhance network security and **configured virtualized environments** to support scalable IT infrastructure.

Newsaad
(Tejarat Pishavar),
Tehran, Iran
Jan. 2023 – present

• Network Administrator

- **Provided comprehensive network and data protection solutions** for high-profile clients, including Iran Insurance Company, Tourism Bank, Blu Bank, and Saman Insurance.
- **Designed and implemented disaster recovery strategies** using **Veritas NetBackup and Veeam**, ensuring robust data protection.
- **Architected network systems, secure tunnels, endpoint protection, and VOIP infrastructure** for enhanced operational efficiency.
- **Led key IT projects**, including:
 - *BluBank*, Veritas NetBackup Installation, Configuration & Management, Jun. 2025
 - *Saman Insurance Company*, Active Directory Deployment, May 2025
 - *Iran Insurance Company*, NetBackup Management & Upgrade, Jul. 2025
 - *Tarash Power Plant*, Symantec Endpoint Protection Deployment, Nov. 2024
 - *Risco*, Veritas NetBackup Implementation, Aug. 2023
 - *Fouladyar Kourosh Company*, VOIP System Installation & Configuration, Oct. 2024
 - *Asynsteel Engineering ing Company*, Full Network Upgrade for Steel Plant, Dec. 2023

Raybod,
Tehran, Iran
Jan. 2023 – present

Honors & Awards

- **Selected Paper Award**
 - The 11th International Conference on Web Research (ICWR), IEEE, 2025.
 - Awarded for its outstanding contribution to the field of Web Research
- **Best Presentation Award**
 - The 14th International Smart Grid Conference (SGC), IEEE, Dec. 31st, 2024 - Jan. 1st 2025.
- **Ranked 3rd in Cumulative GPA & Academic Performance** among all M.Sc. graduates, Khatam University, 2025.
- **Outstanding Graduate Student**, Khatam University, 2023 - 2025.
- **Outstanding Graduate Researcher**, Khatam University, 2023 - 2025.
- **Ranked in Top 4%** Nationally among 20,000 participants, National University Entrance Exam for M.Sc. of Computer Engineering, Tehran, Iran, 2023.

Research Interests

- **Industrial Digital Twins:** Developing efficient, scalable frameworks for creating and processing detailed 3D digital representations of industrial environments (e.g., manufacturing plants and steel facilities), integrating sensor/IoT data streams with geometric and learning-based reconstruction techniques to support simulation, predictive maintenance, and virtual navigation.
- **Spatial Computing and Interaction in Virtual Industrial Spaces:** Exploring AI-driven methods for real-time 3D mapping, occlusion handling, and immersive interaction/navigation in VR/AR platforms, with applications to workforce training, vocational reskilling, and adaptive educational tools in Industry 4.0 contexts.
- **Representation Learning for Industrial Data:** Investigating topology-aware and graph-based representation learning approaches for heterogeneous data (point clouds from sensors, network flows, and enterprise systems), enabling interpretable, computationally efficient models for smart manufacturing optimization, and resource allocation.
- **Applied AI for Sustainability and Human-Centered Systems:** Creating learning-based solutions for environmental monitoring in industrial settings and intelligent platforms that leverage spatial intelligence to enhance sustainability, automation decision-making, and equitable access to vocational/educational reskilling programs.

Teaching & Research Experiences

Graduate Research Assistant

• Smart Digital Reality Lab

- **Director:** Prof. Dr. Babak Majidi
- **Contributed to 6 research projects** in AI and IIoT, including data collection, analysis, and manuscript preparation for publications.
- **Developed and executed research protocols** to collect both qualitative and quantitative data through diverse instruments and controlled environments.
- **Performed advanced data analysis** using statistical and computational methods to extract insights that guided ongoing research efforts.
- **Oversaw research operations and documentation**, ensuring procedural accuracy, data integrity, and adherence to ethical and institutional standards.

Khatam University
2023 – present

Graduate Teaching Assistant

• Machine Learning

- Prof. Dr. Babak Majidi
- **Facilitated student understanding of core Machine Learning concepts** through targeted instruction and tailored learning materials.
- **Assessed projects**, delivering constructive, timely feedback to support students' conceptual and technical growth.
- **Supported student learning outside the classroom** by addressing IoT questions,

Khatam University
2024 – present

mentoring individuals and groups, and encouraging collaboration and peer discussion.

Skills

• Networking & Systems

- CCNA (Cisco Certified Network Associate)
- LPIC-1 (Linux Professional Institute Certification)
- Network+
- Virtualization (VMware ESXi, Hyper-V, Docker)
- Symantec Messaging Gateway & Endpoint Protection
- VMware vSphere (Installation, Configuration, and Management)
- Veritas NetBackup (Design, Policy Management, Disaster Recovery)
- Microsoft Windows & Windows Server
- Sangoma FreePBX (VOIP Systems)
- Digital Hardware Configuration

• LLM & AI Development Environments

- Embeddable Local AI Engines: Ollama, PrivateGPT, GPT4All, Msty, Jan

• Programming & Analytics

- Python, R, Data Analytics & Visualization

• Productivity Tools

- Microsoft Office Suite (Word, Excel, PowerPoint, Outlook)
- LaTeX, Overleaf

• English Test Scores

- IELTS: Actively preparing for 2025, targeting CEFR C1 proficiency
- Duolingo English Test: Considering as a convenient alternative due to accessibility and logistics

Voluntary Services

Academic Mentor and Research Support

- **Provided academic mentorship to graduate students**, offering personalized guidance on research methodologies, project planning, and scholarly writing.
- **Fostered a collaborative learning environment**, encouraging independent thinking and academic confidence among mentees.

Khatam University
2023 – present

Selected Academic Projects

Smart Steel Manufacturing – Energy Optimization with AI, 2024 - 2025

- **Conducted on-site research** at **steel manufacturing plants** to observe industrial processes, collect data, and identify inefficiencies.
- **Built a custom dataset** by analyzing correlations between material properties, machinery parameters, and plant energy usage.
- **Designed and trained AI models** to optimize resource consumption, particularly natural gas, contributing to energy-efficient Smart Manufacturing.

Code not publicly available
due to company policy.

LLM Applications in Industrial IoT Education, 2024 - 2025

- **Developed a framework** combining Large Language Models with dashboard-based

Code not publicly available
due to company policy.

analytics to enhance **IIoT training systems in industrial** settings.

- **Implemented LLM-based simulations** to explain complex manufacturing work-flows and support vocational education in **Steel Industry 4.0**.

Cyber-Physical Systems for Environmental Impact Reduction, 2024

Code not publicly available
due to company policy.

- **Participated in the design and evaluation** of **IoT systems** for monitoring energy use in steel production.
- **Focused on reducing environmental impact** through intelligent control systems and predictive modeling.

References

Babak Majidi

(Master's Supervisor)
Associate Professor
Dept. of Computer Engineering
Khatam University,
Tehran, Iran
Email: b.majidi@khatam.ac.ir 

Abdolah Shamisa

(Master's Advisor)
Associate Professor
Dept. of Electrical Engineering
Khatam University,
Tehran, Iran
Email: a.shamisa@khatam.ac.ir 

Ehsan Akhtarkavan

(Course Student)
Assistant Professor
Dept. of Computer Engineering
Khatam University,
Tehran, Iran
Email: e.akhtarkavan@khatam.ac.ir 