

Vida Gholamian

Research Assistant · Computer Science

Email: vidagholamiyan94@gmail.com (Personal), v.gholamiyan@iasbs.ac.ir (Academic)

[Researchgate](#), [Github](#), [Linkedin](#), [Personal Website](#)

Education

- **MSc in Computer Science**, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran (Sept. 2019 – Dec. 2022)
 - **Thesis Title:** Fast Partial Packet Recovery for Network Coding
 - **Supervisor:** Dr. Peyman Pahlevani
- **BSc in Information Technology Engineering**, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran (Sept. 2014 – Sept. 2019)
 - **Thesis Title:** MQTT Protocol and Smart Irrigation Implementation
 - **Supervisor:** Dr. Peyman Pahlevani

Research Interests

Wireless Communications and Networking, Internet of Things, Data Security, Artificial Intelligence, Network Coding

Publications

- **Title:** Accelerating Partial Packet Recovery in RLNC
Journal: IEEE Communications Letters
Authors: [Vida Gholamian](#), H. K. Nazari, P. Pahlevani, F. Fitzek
- **Title:** FHPRAC: Swift Integrity Verification in PRAC Using HMAC
Status: Submitted for review
Authors: [Vida Gholamian](#), P. Pahlevani

Research Experience

- **Research Assistant at Wireless Communication Lab.**, IASBS (Jan. 2023 – Present)
 - Enhancing the speed of packet recovery and data security using Artificial Intelligence
- **Wireless Communication Laboratory Research Intern** (Sept. 2019 – Dec. 2022)
 - Development of a new method for detecting and correcting erroneous packets in very noisy conditions
 - Securing Packet Communication with FHPRAC
- **IoT Laboratory Research Intern** (Jun. 2017 – Sept. 2019)
 - Developed an online control and monitoring system for intelligent irrigation systems

Teaching Experience

○ Graduate Courses

- Information Theory and Network Coding (2020-2021)
- Advanced Computer Networks (2020-2021)
- Distributed Systems (2021)

Instructor: Dr. Peyman Pahlevani

○ Undergraduate Courses

- Network Lab. (2020)
- Computer Networks (2019-2020)
- Operating Systems (2019)

Instructor: Dr. Peyman Pahlevani

Duties: Conducting weekly reviews, lab or tutorial sessions, evaluating projects

Honors and Achievements

- Ranked 28th out of 208 in the 2024 National Ph.D. Entrance Exam
- Ranked 1st and selected as an Exceptionally Talented Student in the graduate program, 2022
- Ranked 27th out of 426 in the 2022 National Ph.D. Entrance Exam

Skills

○ Languages proficiency

- Persian (Native)
- English (Proficient)

○ Programming Language

- C/C++, Python, Golang, R

○ Tools and Technologies

- Linux (Ubuntu & Kali), Git, web development, Database design (SQL, NoSQL)
- Graphic Design (Photoshop, Illustrator), Project management (Scrum, Agile)
- Network simulators (Kodo, FiFi, NS3), Wireshark
- LaTeX, MATLAB, MQTT protocol for IoT

Reference

- **Dr. Peyman Pahlevani** (E: pahlevani@iasbs.ac.ir)
- **Dr. Reza Parsamehr** (E: reza.parsa@conti-engineering.com)
- **Dr. Bahram Sadeghi Bigam** (E: b_sadeghi_bi@iasbs.ac.ir)