

# Vida Gholamian

Research Assistant · Computer Science

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

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## Education

- **MSc in Computer Science**, Institute for Advanced Studies in Basic Sciences (IASBS), Zanzan, 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), Zanzan, 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