
Hosein K. Nazari

kangavar.nazari@iasbs.ac.ir (Academic), hkangavarnazari@gmail.com (Personal)

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

Education

MSc in Computer Science, Institute for Advanced Studies in Basic Sciences (IASBS), Zanzan, Iran (September 2018 - Present)

GPA: 19.94/20, total 37 credits completed, Rank (1/14)

Thesis title: Energy-efficient network-coding based communications in IoT

Supervisor: Dr. Peyman Pahlevani

Relevant Graduate Courses Passed: Coding Theory (A++), Advanced Computer Network (A++), Computational Data Mining (A++), Real-time systems (A++), Machine Learning (A++), Advanced Algorithm Design (A+)

BSc in Information Technology Engineering, Institute for Advanced Studies in Basic Sciences (IASBS), Zanzan, Iran (September 2014 - September 2018)

GPA: 18.76/20, total 210 credits completed, Rank (1/43)

Supervisor: Dr. Peyman Pahlevani

Research Interest

Coding theory, Error-correcting codes, Wireless communications, Internet of thing

Publication

Title: **Improving the Decoding Speed of Packet Recovery in Network Coding**

Journal: IEEE Communications Letters

Authors: Hosein K. Nazari, K Ghassabi, P Pahlevani, DE Lucani

Title: **Fly-PRAC: Partial Packet Recovery Based on Algebraic Consistency of Dependent Packets for Random Linear Coded Transmission**

The manuscript has been **submitted** for review.

Authors: Hosein K. Nazari, P Pahlevani

Teaching Experience

I have assisted as a **teaching assistant** in the following courses:

Graduate Courses

Distributed Systems (2020), Coding Theory (2019-2021), Advanced Computer Networks (2019-2021), instructed by Dr. Peyman Pahlevani

Undergraduate Courses

Network Lab. (2019), Computer Networks (2018-2019), Operating Systems (2018), Instructed by Dr. Peyman Pahlevani

Algorithm Design (2017), Data Structure (2017), Instructed by Dr. Mansoor Davoodi Monfared

Duties: Weekly lectures, taught courses supplementary materials, evaluating projects

Research Experience

- **SarvTech Research Intern (2020- Present)**

Online Controlling and monitoring systems for air conditioning, implemented in Regional Electric Company in Zanjan Province.

Duties: Developing an IoT system with Node js framework to control actuators, capture and analyze the sensor data, and provide real-time reports.

- **IoT Research Intern (2019-2020)**

Developing a Heating, Ventilation, and Air Conditioning (HVAC) system for reducing electric power usage. Implemented in the Computer Science department, IASBS.

Duties: Developing a smart IoT-HVAC system as a back-end developer

- **Wireless Network Lab Research Intern (2016-2017)**

Duties: Developing a web-based video chat application using WebRTC technology for online classrooms.

- **Cloud Computing Lab Research Intern (2014-2015)**

Duties: Providing a Persian language package for OpenStack cloud software.

Awards

- Ranked 1th among 43 students and selected as the Exceptionally Talented Student in the undergraduate program, 2018

- Winning the 2nd place in FinTech startups competition, Science and Technology Park, Zanjan, Winter 2016
- A member of IASBS IoT team, achieving top teams title in “IoT Cup,” at Iran University of Science and Technology, Tehran, Summer 2015

Volunteer Experience

- A staff member of the International Conference on Contemporary Issues In Data Science (CIDAS), held at Institute for Advanced Studies in Basic Science, March 2019.

Duties: Conference organization, Poster designer

- A staff member of the International Conference on Nonlinear Analysis and Optimization (NAOP), held at Institute for Advanced Studies in Basic Science, June 2018.

Duties: Poster designer

- Computer Science department representative at the research week firm in Zanjan, Fall 2016 - 2018.

Duties: Organizer, Presenting latest software/products developed in the Computer Science department

- University representer at 5th exhibition of ELECOMP fair, presenting an IoT-based system for online classrooms, Fall 2017, Zanjan

Duties: Organizer, and Presenter

Skills

- **Language proficiency**

Persian (Native), Azari (Native), English (Upper Intermediate)

- **Programming Language**

C++, Python, Javascript

- **Familiar with**

Git, Scrum, web development programming (Nodejs, React, PHP), SQL and No-SQL databases, Kodo and Fifi Simulator, NS3 Simulator, Wireshark,

Project management tool e.g., Scrum and Kanban

UX and UI design (Photoshop, Illustrator)

LaTeX

- **Other skills**

Quickly establish effective relationships with colleagues

References

Dr. Peyman Pahlevani, Assistant professor

Information Technology and Computer Science Department, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran.

pahlevani@iasbs.ac.ir

Tel: (+98) 24 3315 3436

Dr. Bahram Sadeghi Biqam, Associate professor

Information Technology and Computer Science Department, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran.

b_sadeghi_b@iasbs.ac.ir

Tel: (+98) 24 3315 3379

Dr. Mansor Davoodi Monfared, Assistant professor

Information Technology and Computer Science Department, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran.

mdmonfared@iasbs.ac.ir

Tel: (+98) 24 3315 3376