Ali Javadi

Curriculum Vitae

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DOB: Jan 15, 1997



Education

2023–Present **PhD of Computer Architecture**, *Iran University of Science and Technology*, Tehran, Iran, Under Supervision of Dr. Amir Mahdi Hosseini Monazzah.

2020–2023 **Masters of Computer Architecture**, *Iran University of Science and Technology*, Tehran, Iran, Under Supervision of Dr. Amir Mahdi Hosseini Monazzah.

2015–2019 Bachelor of Computer Software Engineering, Semnan University, Semnan, Iran.

Masters Thesis

Title Providing an Efficient Task Offloading Algorithm in Fog Computing Applications

Supervisors Dr. Amir Mahdi Hosseini Monazzah

Description We Have Presented FACT as a Solution Using Reinforcement Learning Algorithms to Improve Task Offloading Destination Determination, Resulting in a 19.04% Improvement in Task Hit Ratio and Reduction of Task Lateness Compared to Other Methods.

Research Interests

- 1. Memory Systems.
- 2. In Memory Computing.
- 3. Fault-tolerant Design.
- 4. Internet of Things.
- 5. Fog Computing Infrastructures.
- 6. Embedded Systems.
- 7. Low-power Design.
- 8. Reinforcement Learning.

Honors & Awards

1. Ranked 4^{th} in Ph.D. Computer Architecture Entrance Exam.

Skills & Abilities

Programming Verilog HDL, VHDL, SystemC, $\mathrm{C/C}++$ Languages

Tools Altium Designer, Cooja, ModelSim, HDL Designer, MATLAB & Simulink, HSpice, LabVIEW, CloudSim, iFogSim

Software LATEX, ICDL, AUTOCAD

Intermediate PYTHON, LATEX, OpenOffice, Linux, Microsoft Windows

Advanced Computer Hardware

Teaching

2023-Fall **Computer Architecture Laboratory**, LECTURER, Iran University of Science and Technology.

2022-Fall **Design of Fault-tolerant Systems**, TEACHER ASSISTANT, Iran University of Science and Technology, Under Supervision of Dr. Amir Mahdi Hosseini Monazzah.

2020–Present **Embedded and IoT Systems**, TEACHER ASSISTANT, Iran University of Science and Technology, Under Supervision of Dr. Amir Mahdi Hosseini Monazzah.

2023-Fall **Advanced Computer Architecture**, TEACHER ASSISTANT, Iran University of Science and Technology, Under Supervision of Dr. Pejman Lotfi-Kamran.

2020-Fall **Computer-aided Design**, TEACHER ASSISTANT, Iran University of Science and Technology, Under Supervision of Dr. Hajar Falahati.

2020-Fall **Microprocessor and Assembly Language**, Teacher Assistant, Semnan University.

2020-Fall Interface Circuits Design, TEACHER ASSISTANT, Semnan University.

2019-Fall Digital Systems Design, TEACHER ASSISTANT, Semnan University.

2019-Fall Artificial Intelligence, TEACHER ASSISTANT, Semnan University.

2019-Fall Robotics Workshop, LECTURER, Semnan University.

2029-Fall ARM Workshop, LECTURER, Semnan University.

Working Experience

Summer 2023 **CEO** and Founder, Cyber Physical Pioneers (Metable), Tehran, Iran.

Summer 2023 **Visiting Lecturer**, IRAN UNIVERSITY OF SCIENCE AND TECHNOLOGY, IUST, Tehran, Iran.

Summer 2021 **Technical Consultant**, IRAN SMALL INDUSTRIES AND INDUSTRIAL PARKS ORGANIZATION, ISIPO, Tehran, Iran.

Freelancer

Publications

A. Javadi, A.M.H. Monazzah, "Fuzzy Assisted Machine Learning Based Computation Offloading Scheme for Internet-of-Things Infrastructure", Submitted to Internet of Things Journal

H. Pourrahmani, A. Javadi, A.M.H. Monazzah, J.V. Herle a "Real-time H2S detection kit for hydrogen fuel cell", Heliyon, Elsevier

A. Javadi, A.M.H. Monazzah, Investigating the Use of Energy Harvesters for Wireless Sensor Networks, the 4th National Informatics Conference, 2023, Iran

M. Aliazam, A. Javadi, A.M.H. Monazzah, Investigating the Ways of Increasing Reliability and Accessibility in Fog-based Health Care Systems, the 28th International Conference of Computer Society, 2023, Iran

A. Javadi, Z. Naderi, A.M.H. Monazzah, Investigating the Effects of RPL Objective Functions in Energy Harvesting of Thermoelectric Sensors, Journal of Computer Science, 8(3), 2024, Iran

Please check my google scholar page for an up to date list of my publications

Accomplished Projects

2023 Vending Machine Controller.

Metable Co.

2022-Present PATRIIoT IoT Platform, Project Manager.

Metable Co.

2023 LoRa AccessPoint Development.

Metable Co.

- 2022 **Design and Manufacture of Hydraulic Mobile Lifting Jack Controller Board**. Parizan Sanat Co.
- 2021 **Design and Manufacture Control Board of Hydraulic Tensile Testing Machine**. Khak Pey Arvin Co.
- 2020 **Design and Implementation of Intelligent GreenHouse Control System**. Pooya Fanavaran Energy Qumis Co.
- 2020 Namak Smart Librarian.

Semnan Book Capital Secretariat

2020 Design and Implementation of Car Tracker.

Parsian Lotus Khavarmianeh Co.

2019 Solar Panel Angle Control Circuit.

Fanavar Hamrah Houshmand Ofoq Co.

2019 Intelligent Controller of the Air Conditioning System.

Tahvieh Gostar Arvan Co.

2018 Rack Monitoring System.

Kumeshian Part Pishrafte Co.

Languages

Farsi Native Speaker

English Fluent