

# Shirin Ebadi

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## EDUCATION

### Bachelor of Science in Computer Engineering

Amirkabir University of Technology

Tehran, Iran

Sep. 2018–Present

- **Expected Graduation Date:** May 2023
- **Total GPA:** 18.1/20 (3.84/4.0)
- **Bachelor Project:** "Implementing Emotion Detection System Based on Serverless Edge Computing in IoT applications" (Ongoing)
- **Supervisor:** Dr. Masoud Sabaei

### Diploma in Mathematics and Physics

Nemouneh Kosar High School

Zanjan, Iran

Sep. 2014–Aug. 2018

- **GPA:** 19/20 (4/4)

## RESEARCH INTERESTS

- Cloud/Edge/Serverless Computing
- Distributed Systems
- Internet of Things
- Computer Networks
- Operating Systems

## RESEARCH EXPERIENCE

### Remote Research Intern

Monash University

Monash, Australia

Jun. 2022–Present

- Proposed an advanced context-aware Kubernetes scheduler for heterogeneous clusters in order to solve the problem of workload interference in such environments. The result will be a paper which is under preparation.
- **Supervisor:** Dr. Adel N. Toosi

### Research Intern

Amirkabir University of Technology

Tehran, Iran

Jul. 2022–Present

- Studied the performance of serving machine learning models in a serverless platform at edge. (Bachelor Project)
- **Supervisor:** Dr. Masoud Sabaei

## TEACHING EXPERIENCE

### Teaching Assistant

Amirkabir University of Technology

Tehran, Iran

Apr. 2021 - present

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|--|---|
| ◦ <b>Microprocessors and Assembly Language</b><br>Instructor: Dr. Hamed Farbeh | ◦ <b>Operating Systems</b><br>Instructor: Dr. Hamidreza Zarandi |
| ◦ <b>Internet of Things</b><br>Instructor: Dr. Siavash Khorsandi               | ◦ <b>Computer Networks</b><br>Instructor: Dr. Pooya Hejazi      |

### English Teacher

Rah-e-roshd Institute

Zanjan, Iran

May. 2020 - Jul. 2020

## SELECTED COURSES

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|---|--|
| ◦ Computer Networks and Lab (20/20)     | ◦ Operating Systems and Lab (18.05/20)               |
| ◦ Principles of Cloud Computing (20/20) | ◦ Algorithm Design (17.98/20)                        |
| ◦ Internet of Things (20/20)            | ◦ Differential Equations (20/20)                     |
| ◦ Web Programming (20/20)               | ◦ Principles of Computational Intelligence (17.5/20) |
| ◦ Multimedia Systems (19.4/20)          | ◦ Robotics (18.4/20)                                 |

## WORK EXPERIENCE

### Software Engineer

Snapp! (Full-time)

Tehran, Iran

Oct. 2021–Jun. 2022

- The largest and fastest-growing internet company in Middle-east.
- Developed applications using Golang, gRPC, Cassandra, and Nats.
- Deployed applications on Openshift cluster and VM based on custom configuration.
- Monitored pods and services using Prometheus(Grafana) and Elasticsearch(Kibana)

## SELECTED PROJECTS

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**Smart Office**, IoT Course Project: Developed central and local servers controlling the entrance of users and also the light value of their room in an office. Local server communicates with NodeMCU board using MQTT protocol.

Tools: Golang(Echo framework), MQTT, NodeMCU

**VirtualBox VM Manager**, Cloud Computing Course Project: An endpoint which enables users to manage their VMs and also their containers through it.

Tools: Golang

**HTTP Monitor**, Personal Project: Developed a service for monitoring registered URLs based on microservice architecture. After the determined number of errors, the service begins to notify the user.

Tools: Golang, NATS, SQLite

**Pashmak Shop**, Web Designing Course Project: Developed an online marketplace in which admin can add, remove, and edit products. Users can increase their charges and purchase the products. Both roles should register/login first.

Tools: Django, PostgreSQL, HTML, CSS

**VFH Obstacle Avoidance**, Robotics Course Project: Implemented a new real-time obstacle avoidance method for mobile robots, named "vector field histogram (VFH)".

Tools: Python(ros), Gazebo

**Snail Jumper**, Computational Intelligence Course Project: Developed a game in which the agent decides when to jump using genetics algorithm and neural networks.

Tools: python(NumPy)

**Search Engine**, Information Retrieval Course Project: Developed a search engine based on tf-idf method and enhanced it.

Tools: Jupiter notebook

## SKILLS SUMMARY

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**Languages:** GO, Python, PHP, C, JavaScript, Bash, JAVA

**Tools:** Kubernetes, Docker, GIT, PostgreSQL, MySQL, SQLite

**Platforms:** Linux, Windows, Arduino, Raspberry

## HONORS AND AWARDS

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- Identified as an exceptional talent student at Amirkabir University of Technology
- Received scholarships from the Supporter Foundation of Amirkabir University of Technology
- Ranked among top 0.7% out of almost 140,000 participants in the Nationwide University Entrance Exam

## LANGUAGES

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**Farsi:** Native

**English:** Toefl iBT Score: 103 [Reading: 27, Listening: 25, Speaking: 26, Writing: 25]

## REFERENCES

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Available upon request.