## **Amirhossein Najafizadeh**

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Education

Amirkabir University of Technology (Tehran Polytechnic), Iran GPA: 3.86 / 4 2019 - 2023

B.Sc., Computer Engineering, (Rank 3 among all Iranian Universities)

Shahid Hashemi Nejjad School (Sampad), Mashhad, Iran GPA: 19.6 / 20 2016 - 2019

Diploma, Math and Physics

### Research Interests

Cloud Computing Virtualization Computer Networks & Communications

## Skills

- Proficient in: Golang, C, Python, Java, JavaScript, ShellScript, PHP, MySQL, Docker, Kubernetes, HelmCharts, OKD
- Fairly familiar with: Dart, Latex, Rust, Ruby, C++, GraphQL, gRPC, Ansible, Terraform, Jenkins, Grafana, Firewall, DNS
  Server, Mail server
- Having experience of working with: Git, ArgoCD, Elasticsearch, Prometheus, NginX, HA Proxy, QEMU, KVM, S3,
  MinIO, Ceph, NATS, Kafka, RabbitMQ, EMQX, Big data, SSH, PostgreSQL, MongoDB, Redis, Gitlab CI/CD, GitHub Actions, Laravel, Vue.js

### **Articles**

- o B Sadeghian, A Najafizadeh, A Delkhosh, S Khorsandi, "PTaaS: Automated penetration testing", in progress
- o SA Javadi, A Najafizadeh, "QJUMP over Golang channels", published, ResearchGate
- A Najafizadeh, A Delkhosh, "Bufferoverflow Attack: hack computer memory", published, ResearchGate

## **Projects**

- B.Sc. Project: Implementing an automated penetration testing system for cloud-based applications. (Golang, JavaScript, Shell Script, Python, Docker, Kubernetes) (organization)
- o QJUM on Golang channels: Adding scheduling to Golang channels in order to jump their gueues. (Golang) (code)
- o Pods Watcher: Creating a k8s controller for monitoring pods resource consumption. (Golang, Kubernetes) (code)
- WebRTC: Creating a web-based platform for making video calls by using WebRTC. (Golang) (code)
- AuthX: Creating a IDaaS application for authenticating the Amirkabir students in cloud computing course. (Golang, HTML, JavaScript, Docker) (code)
- Jetstream Mirroring: Using benthos to mirror income traffic of NATS cluster to another cluster in different region.
  (Golang, Benthos, Docker) (code)
- o IMDB website clone: Implementing a movie streaming website like IMDB. (Go, HTML, JavaScript, Python) (code)
- o Chatroom over SSH: Creating a secure chatroom over SSH. (Python) (code)
- HTTP Endpoints monitoring: Implementing a Restful API to monitor users' endpoints. (Golang, Docker) (code)
- Service Monitoring with Prometheus: Using Prometheus to expose metrics of a remote server. (Golang) (code)

### Notable coursework & Technical Reports

- A Najafizadeh, "NATS Jetstream mirroring", published, golangexample.com
- A Najafizadeh, M Sabaei, Gh Ashofteh, "Computer Networks Lab Manual", Amirkabir University of Technology

- o A Najafizadeh, SA Javadi, "Virtualization course syllabus", Amirkabir University of Technology
- o A Najafizadeh, SP Alvani, "CORS error handling in web developing", Amirkabir University of Technology

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| Fall 2023   | Internet Engineering, under supervision of Lecturer. Seyed Parham Alvani |
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| Spring 2023 | (Head TA) Cloud Computing, under supervision of Prof. Seyed Ahmad Javadi |
| Spring 2023 | (Head TA) Computer Networks, under supervision of Prof. Babak Sadeghian  |
| Spring 2022 | Operating Systems, under supervision of Prof. Seyed Ahmad Javadi         |
| Spring 2022 | Principle of Database design, under supervision of Prof. Saeedeh Momtazi |

# Internships

| Summer 2022 | Software and Cloud Engineer at Snapp! company, maintainer of EMQX and NATS clusters         |
|-------------|---|
| Summer 2021 | Backend Developer at Sharif University of Technology, developing websites using PHP/Laravel |

### Honors

| 2023        | In the top 10% among all 2023 Graduated Students in Computer Engineering department      |
|-------------|--|
| 2022        | Head secretary of 12th Amirkabir Linux Festival  |
| 2021 – 2022 | Member of the 16th term of the Scientific Association in Computer Engineering department |
| 2021        | Staff and Website administrator at International Collegiate Programming Contest (ICPC)   |
| 2019        | In the top 0.05% Math & Pysics students in the Nation-wide University Entry Exam         |

# English

o TOEFL (will be taken on December 3<sup>rd</sup> 2023)

## Certificates

- o "Docker & Docker Swarm", KodeKloud
- o "Kubernetes", KodeKloud
- o "Helm Charts", KodeKloud
- o "Full hands-on Docker", Udemy
- o "Introduction to containers", IBM

## References

Babak Sadeghian (Prof.)
 Seyed Ahmad Javadi (Prof.)
 Saeedeh Momtazi (Prof.)
 Masood Sabaie (Prof.)
 sabaei@aut.ac.ir

Seyed Parham Alvani (Lecturer) parham.alvani@aut.ac.ir