# SAEED KHOSRAVI

**Phone:** +39 351 615 8597;
**Email:** saeedkhosravi72@gmail.com;
**LinkedIn:** saeed-khosravi-42944537;
**Website:** saeedkhosravi.it;
**Github:** git.saeedkhosravi.it/saeed;

## PROFESSIONAL SUMMARY

I have over four years of experience as a Backend Developer, having worked at companies in my home country, Iran, where I encountered diverse technical challenges in backend and DevOps domains. Throughout these experiences, I learned various techniques, technologies, and tools that helped me grow as a developer and become a better problem solver.

In recent years, I have developed a strong interest in Artificial Intelligence and its potential to solve real-world problems, which led me to pursue a Master's degree in this field to contribute to this technological revolution.

I am currently a second-year student and am seeking an opportunity to work with a company that tackles real-world challenges, builds large-scale projects, and has a bright future. I am open to full-time, part-time, remote, on-site, hybrid, or project-based work.

## WORK EXPERIENCE

### BACKEND DEVELOPER

*Respina Network & Beyond, Tehran, Iran* *Aug 2022 – Mar 2024*

**Technologies & Tools:** Python, Django, Flask, RESTful APIs, Celery, RabbitMQ, PostgreSQL, Docker, Kubernetes, Git, CI/CD (GitLab CI), Prometheus, Loki, Grafana, Linux, Nginx, Troubleshooting & Performance Optimization

Respina is a leading provider of telecommunications solutions in Iran, offering dedicated internet access, SIP-Trunk, Hosted-PBX phone services, and data center colocation. Trusted for reliability and innovation, Respina enables seamless connectivity and robust communication for businesses, contributing to Iran's digital infrastructure and economic growth. This was one of the most impactful periods of my career, where I gained deep hands-on experience in analyzing, testing, and optimizing large-scale backend systems. As part of the Hosted-PBX (Nexfon) team, I worked on improving the performance, scalability, and reliability of enterprise-grade telecommunication services. Redesigned and optimized the billing system using CGRATES, implementing a real-time charging solution that improved billing accuracy and efficiency. Reduced monthly reporting time from 30 minutes to 40 seconds by optimizing database queries, parallelizing tasks with Celery, and improving data aggregation workflows. Refactored the Asterisk-ARI integration into an event-driven Flask micro-service, containerized with Docker, and enhanced with multi-processing, increasing concurrent call capacity per instance from 25 to 130 and reducing infrastructure load by nearly 5×. Implemented comprehensive monitoring and troubleshooting using Prometheus, Loki, and Grafana, improving observability and system reliability. Collaborated with the DevOps team to migrate deployments to a Kubernetes-based cloud infrastructure, enhancing scalability, fault tolerance, and CI/CD automation.

### BACKEND DEVELOPER

*ANIL Web design studio, Tehran, Iran* *Nov 2021 – Jul 2022*

**Technologies & Tools:** PHP, Laravel, JavaScript, CSS3, HTML5, RESTful APIs, Postman, MySQL, Git, Docker, Linux, Nginx, Agile Collaboration

Collaborated with a highly skilled development team composed of top university talents, gaining valuable exposure to modern software design practices and collaborative workflows. Contributed to two major web projects — RadmanPack and PelikanIran — by developing and integrating backend systems using PHP and the Laravel Framework, while coordinating closely with frontend developers working in React.js. Focused on designing RESTful APIs, implementing secure authentication, and ensuring smooth data exchange between backend and frontend components. Additionally, gained hands-on experience in version control (Git), containerization with Docker, and deployment on Linux-based environments, emphasizing maintainability, scalability, and team collaboration.

### BACKEND DEVELOPER

*AvinAvisa Lab, Tehran, Iran* Oct 2020 – Jul 2021

**Technologies & Tools:** Node.js, Express.js, MongoDB, JavaScript, Blockchain Integration (Ethereum, TRON), RESTful APIs, Git, Docker, Linux, WebSocket Communication

Worked in a research-driven environment within the Blockchain Laboratory of Amirkabir University of Technology, focusing on the development of decentralized systems and blockchain-based applications. Contributed to the design and implementation of a cryptocurrency exchange platform (Polychain) enabling peer-to-peer trading with advanced matching logic based on trade volume, customer tier (VIP levels), and other dynamic factors. Implemented a custom matching algorithm inspired by the Knapsack problem, optimizing trade pair selection and transaction efficiency. Additionally, integrated the platform with Ethereum and TRON networks, handling blockchain interactions and ensuring secure, real-time transaction processing. Collaborated with a small, multidisciplinary team, applying the MERN stack (MongoDB, Express.js, React.js, Node.js) and blockchain APIs to build a robust, scalable backend system.

### MILITARY SERVICE

*Army, Tehran, Iran* Jul 2018 – Jul 2020

In Iran, military service is compulsory for men and must be completed in order to obtain permission to leave the country. The service lasts for two years. During this period, I collaborated with Dr. Moosaei (Charles University) and Dr. David Musicant (Carleton College) on one publication and one research project, while also engaging in self-study in machine learning and image processing to enhance my technical expertise.

### ANDROID DEVELOPER

*Ishaya, Tehran, Iran* Aug 2016 – Apr 2018

**Technologies & Tools:**Java, Android SDK, RESTful APIs, MySQL, Git, XML, Material Design

Started my professional journey in software development as an Android Developer, initially joining as an intern and later continuing as a full-time engineer due to strong performance and enthusiasm for mobile technologies. Contributed to the development of Ponila, the first intelligent content recommendation system for Persian-language users. The platform utilized semantic and syntactic analysis of Persian text to deliver personalized article recommendations based on user interests, improving content discovery and engagement. Collaborated with backend and data science teams to integrate recommendation algorithms and ensure seamless data synchronization between the mobile app and server-side APIs. Focused on building a responsive, stable, and scalable Android application aligned with modern UI/UX principles.

## EDUCATION

### CA' FOSCARI UNIVERSITY OF VENICE

*Master's Degree in Artificial Intelligence and Data Engineering,* Sep 2024 – Present

### UNIVERSITY OF BOJNORD

*Bachelor's Degree in Computer Science,* Sep 2012 – Jun 2016

### RAJAEI HIGH SCHOOL

*Pre-University & Diploma in Mathematics and Physics,* Sep 2010 – Jun 2012

## ARTICLES

### A novel method for solving universum twin bounded support vector machine in the primal space

*Annals of Mathematics and Artificial Intelligence* Nov 2023

In this Article we propose (NUTBSVM), a Newton-based approach for solving in the primal space the optimization problems related to Twin Bounded Support Vector Machines with Universum data (UTBSVM). In the NUTBSVM, the constrained programming problems of UTBSVM are converted into unconstrained optimization problems, and a generalization of Newton's method for solving the unconstrained problems is introduced.

## PROJECTS

### ActiveRecaller.com

*MERN stack - Oct 2025*

Recently, I have been developing a website for active recall learning. You can upload ANKI, CSV, or PDF files, use AI agents such as OpenAI GPTs, Google Gemini, or Claude, or create flashcard decks manually. You also are able to share your decks with your friends, enjoy the website using mobile, or desktop, and review your decks based on the difficulty of each cards.

### Article Summary Automation

*Python, FastAPI, N8n - Sep 2025*

I started to read new articles on a daily basis in the field of Machine Learning. I made an automation using n8n, Google Gemini, Postgres, and a website using Fast-API that made this more productive, and time efficiently by summarizing recently published articles.

### RePAIR Project

*Python, Ultralytics - Sep 2024*

The main goal of RePAIR project is to develop a ground-breaking technology to virtually eliminate one of the most labour intensive and frustrating steps in archaeological research, namely the physical reconstruction of shattered artworks. Indeed, countless vases, amphoras, frescos and other ancient artifacts, all over the world, have not survived intact and were dug out from excavation sites as large collections of fragments, many of which are damaged, worn out or missing altogether.

### S3VM vs Newton UTSVM

*Python - Apr 2023*

In this project, we implemented two models: the Semi-Supervised SVM (S3VM) and the Newton-based Universum Twin SVM (Newton-UTSVM). S3VM strengthens learning with unlabeled data, while Newton-UTSVM improves generalization using Universum data. After comparing their performance, we propose a new method—the Unconstrained S3VM—that combines the advantages of both approaches for a more flexible solution.

### Dental Assistant

*Python, Django, PyTorch - Feb 2023*

Implemented a panel for dentists to set patients records and X-rays images, and used an AI model to detect decayed and damaged teeth or teeth that may be at risk of future decay of patients and reports these findings to the dentist so they can provide the necessary care.

### Multi-Class Normally Distributed Cluster Centers Data Generator

*Python, Matlab - Jul 2020*

Collaborating with Charles University and Carleton College professors, implemented a multi-class variation of normally distributed cluster centers data generator, for comparing the performance of classification models.

## LICENCES and CERTIFICATES

### Machine Learning Specialization

*Stanford Online, DeepLearning.AI - Oct 2025*

This certifications consists of 3 courses: Supervised Machine Learning (Regression and Classification), Advanced Learning Algorithms, Unsupervised Learning, Recommenders, Reinforcement Learning

### Auditor Courses

*Tehran University - Jan 2021 - Jun 2022*

As an auditor I participate in courses Deep Learning, Machine Learning in Tehran University.

### TOEFL

*Overall Score: 101 - Mar 2023*

### GRE

*Overall Score: 304 - Feb 2021*