

Sina Labbaf

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🎓 Google Scholar: Sina Labbaf

EDUCATION

University of California Irvine

Doctorate in Computer Science / Thesis: ZotCare, AI-Enabled Mobile Health Service

Irvine, CA

Sep 2017 - Sep 2023

University of Tehran

Bachelors in Computer Engineering

Tehran, Iran

Sep 2012 - Jun 2016

WORK EXPERIENCE

Senior Software Engineer

Commure

Mountain View, CA

Oct 2023 - Now

- Led the performance and reliability of a Internet-of-Things hospital system for real-time asset tracking and nurse duress safety
- Improved indoor location accuracy by more than 150% by incorporating Machine-learning, signal processing, and Kalman-Filter
- Designed a robust and high-throughput safety infrastructure deployed in the largest hospital networks across the United States

Research Software Engineer

UC Irvine

Irvine, CA

Sep 2017 - Sep 2023

- Lead, designed, and developed a cybernetics health service for remote healthcare monitoring and intervention.
- Serviced over **10 projects** with more than **1500 participants** in different fields: mental health, maternal well-being, elderly care, etc.
- Achieved high performance in processing and storing high-frequent longitudinal healthcare data in a micro-service server design.
- Improved participant engagement by developing a multi-platform dynamic mobile app for labeling and intervention.
- Designed web dashboards enabling the creation of data processing pipelines and machine learning engines.
- Supervised diverse teams of more than **30** undergraduates, exchange students, and visitor scholars from around the globe

Software Engineer, Intern

Unity Technologies

San Francisco, CA

Jun 2022 - Aug 2022

- Interned in Ads Mediation Features team at Unity Operate Organization.
- Designed the full-stack integration of customer history change log feature for Unity Mediation.

Full-Stack Software Engineer

Pegah Tech

Tehran, Iran

Sep 2016 - Sep 2017

- Contributed to the launch of products in gaming BaaS and SaaS, mobile advertisements, Real-estate solutions, and online chat support
- Demonstrated expertise in designing, developing, and testing web-application dashboards for a diverse range of internet services
- Boosted user engagement with ads by creating a light-weight interactive mobile ads SDK

NOTABLE PROJECTS

- Improve user engagement and accuracy by using context-aware active learning and reinforcement learning to collect mental health data
- build monitoring and adaptive physical exercise recommender engine for underserved pregnant women
- Accurately forecast future mood and emotions using bio-signals in college students
- Indie-Game Design and Development: Collaborate with groups of independent artists to design and develop video games

SKILLS

Programming Languages: Python, TypeScript, Java, Go, C, C++

ML Libraries: TensorFlow, PyTorch, Keras, Scikit-learn

Database: Non-Relational Databases: MongoDB, Relational | Databases: PostgreSQL, MySQL | Time Series Databases: InfluxDB

Server & API: Python: FastAPI, Flask, Django, Celery | TypeScript: Node.js, Express, InversifyJS

Web & Mobile: React, React Native, Angular, Flutter, Component Libraries (MaterialUI, React Native Paper), Android Native

Infrastructure: Google Cloud Platform (GCP), AWS, Kubernetes, Docker, Helm, Terraform

Game Development: Unity, GameMaker Studio

HONORS AND AWARDS

2017 **Valedictorian**, *Graduated with highest GPA*

University of Tehran

2016 **Best Game**, *National Game Development Content*

Iran

2014 **Top 5**, *ACM International Collegiate Programming Contest (ACM-ICPC)*

Asia Regional

NOTABLE PUBLICATION

Labbaf, Sina, et al. "ZotCare: a flexible, personalizable, and affordable mhealth service provider." *Frontiers in Digital Health* 5 (2023)