Sina Heidari

Curriculum Vitae

Personal Information

Email Address	sina1997heidari@gmail.com
Personal Page	https://s1naheidari.github.io
Github Page	https://github.com/S1naHeidari
Skype	ustoir
Google Scholar	https://scholar.google.com/citations?user=-NFnSYgAAAAJ&hl=en&oi=ao
Researchgate	https://www.researchgate.net/profile/Sina-Heidari-7

Education

University of Zanjan — Zanjan, Iran

Master's degree in Computer Software Engineering — *2021 – present*

GPA: 18.19 (out of 20); 4 (out of 4 using WES insturction)

Rank: 1st in class

Graduation: April 2024 (anticipated)

University of Kurdistan — Sanandaj, Iran

Bachelor degree in Computer Software Engineering — *2016 – 2021*

GPA (last two years): 3.57 (out of 4 using WES insturction)

Overall GPA: 15.79 (out of 20)

Research Interests

- Distributed (Cloud) Systems
- AI-driven Systems and Networks
- Internet of Things
- High-performance Computing

Publications

Heterogeneity-aware Load Balancing in Serverless Computing Environments — 2023

Authors: Sina Heidari, Sadoon Azizi

Conference: The 7th International Conference on Internet of Things and Its Applications

Status: Published by IEEE

Link: https://ieeexplore.ieee.org/document/10365354

Work in Progress

Application of Deep Reinforcement Learning for Energy-efficient Resource Scheduling in Multi-tenant and Heterogeneous Serverless Computing Environments

Research Experience

Graduate Research

Distributed Computing Systems Research Laboratory (DCS Lab) — *2020 – present*

Supervisors: Dr. Sadoon Azizi, Dr. Majid Meghdadi

Broad Research Area: Serverless Computing

Specific Research Focus: Autonomous resource scheduling in serverless computing environments

Thesis Title: QoS-aware and Energy-efficient Resource Scheduling in Serverless Computing Environments

Thesis Approach: Developing deep reinforcement learning agents capable of intelligently scheduling resources

Additional Research Areas: Addressing issues related to heterogeneity in edge clouds
Technical Skills: Kubernetes, Prometheus, Tensorflow, PyTorch

Undergraduate Research

Data Science Laboratory *2018 – 2020*
Supervisor: Dr. Parham Moradi
Broad Research Area: Data Science, Machine Learning
Specific Research Focus: Recommender Systems, Indoor Positioning Systems, Natural Language Processing (NLP)
Project: Data exploratory analysis and solution for six Kaggle challenges.
(Recommender Systems, Tweet Sentiment Extraction, Toxic Comment Classification,
M5 Time Series Forcasting, Abstraction and Reasoning, Indoor Location and Navigation)
Technical Skills: Python, Pandas, Scikit-learn

Teaching Experience

University of Kurdistan

Teaching Assistant *Winter 2018*
Course title: Advanced Programming
Responsibilities: Holding classes weekly and marking assignments.
Professor: Dr. Rojiar Pir Mohammadiani

Teaching Assistant *Summer 2017 & Fall 2017*
Course Title: Fundamentals of Computer and Programming
Responsibilities: Holding classes weekly and marking assignments.
Professor: Dr. Sadoon Azizi

Test Scores

TOEFL	104: (R) 27 (L) 28 (S) 22 (W) 27	April, 2022
GRE	Registered to be taken in December 2023	

Technical Skills

- Programming Languages: Python, C/C++, Java, C#
- Operating Systems: GNU/Linux (Arch Linux, Manjaro, Ubuntu, Debian, CentOS)
- Virtualization/Cloud: Kubernetes, Xen, Docker, Virtualbox, Vagrant, Ansible, Prometheus
- Data Science & Machine Learning: Scikit-learn, Pandas, PyTorch, Tensorflow

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Awards and Honors

Best Paper Award: The International Conference on IoT & Applications, University of Isfahan	2023
Master's program valedictorian, top 10 among entering engineering students	2023
Granted, National University Tuition Waiver (including partly necessary expenses)	2016

Academic Projects

Development of a ticket management system to streamline customer support and issue tracking (Course: Software Engineering)

Information retrieval system using inverted index and TF-IDF (Course: Information Retrieval)

Setting up production-ready Kubernetes clusters using Vagrant and Ansible as Infrastructure as Code (IaC) tools

Developed custom schedulers and load-balancers to enhance the performance of serverless functions running within Kubernetes clusters

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Related Courses

- Advanced Computer Networks: 19/20
- Advanced Operating Systems: 20/20
- Internet of Things: 19/20
- Programming Languages: 18.64/20
- Software Engineering: 18.65/20
- Artificial Intelligence: 17/20

References

Dr. Sadoon Azizi	s.azizi@uok.ac.ir	https://research.uok.ac.ir/~sazizi/en/
Dr. Parham Moradi	p.moradi@uok.ac.ir	https://research.uok.ac.ir/~pmoradi/en/
Dr. Majid Meghdadi	meghdadi@znu.ac.ir	https://www.znu.ac.ir/members/meghdadi-majid/en
Dr. Rojiar Pir mohammadiani	r.pirmohamadiani@uok.ac.ir	https://research.uok.ac.ir/~rpirmohammadiani/en/