

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

Education

University of Zanjan ZANJAN, IRAN
Master's degree in Computer Software Engineering 2021 – present
GPA: 18.33 (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
 - Internet of Things
 - AI-driven Systems and Networks
 - High-performance Computing
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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: Presented and awarded best paper
Link: <https://iot2023.ui.ac.ir/en/>

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 Forecasting, 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. Rojia 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

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. Rojia Pir mohammadiani	r.pirmohammadiani@uok.ac.ir	https://research.uok.ac.ir/~rpirmohammadiani/en/