Iman Rahmati

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% Web page: imanrht.github.io

• Github: https://github.com/ImanRHT in Linkedin: linkedin.com/in/iman-rahmati

Research Interests: Distributed Systems, Mobile Edge Computing, Deep Reinforcement Learning, Federated Learning, Software Defined Networking, Performance Evaluation

EDUCATION

MSc. Computer Software Engineering

Sharif University of Technology (SUT)

updated: 16 Nov 2023

Graduated Sep 2022, 17.36/20 GPA (23 units)

Thesis Title: A Novel Resource Allocation Algorithm in Edge Computing with Deep

Reinforcement Learning •

Supervisor: Prof. Ali Movaghar

BSc. Industrial Engineering

Khajeh Nasir Toosi University of Technology (KNTU)

Graduated Sep 2019

PUBLICATION

I. Rahmati, H. Shah-Mansouri, A. Movaghar, "QOCO: A QoE-Oriented Computation Offloading Algorithm based on Deep Reinforcement Learning for Mobile Edge Computing", submitted to IEEE Internet of Things Journal 2023.

ACADEMIC EXPERIENCE

Research Assistant

• Research Assistant at Performance and Dependability Laboratory (PDL)

Supervisor: Prof. Ali Movaghar

SUT, 2020-present

Research Theme: Designed and implemented an algorithm leveraging deep rein-

Research Theme: Designed and implemented an algorithm leveraging deep reinforcement learning to optimize computation offloading decisions within mobile edge computing, with a primary focus on enhancing the Quality of Experience (QoE) for end-users of mobile applications.

Teaching Assistant

• Performance Evaluation of Computer Systems (Head TA) SUT, 2020-present Prof. Ali Movaghar and Dr. Mahdi Dolati

• Software Defined Networking (Head TA)

Prof. Ali Movaghar and Dr. Mohammad Hosseini ♂

• Verification of Reactive Systems
Prof. Ali Movaghar
SUT, 2021

• Theory of Machines and Languages
Prof. Ali Movaghar

SUT, 2021

Reviewer at 27th International Computer Conference

CSICC, 2022

Computer Society of Iran (CSICC)

IEEE website published papers from this conference.

HONORS

- Ranked Top 25% in the Department of Computer Engineering among M.Sc. Students, SUT, Class 2019

 Jul 2022
- \bullet Ranked 55th among 30,000 Participants in the Nationwide University Entrance Exam of Computer Engineering for M.Sc. in the Field of Software Engineering Aug 2019
- ❖ Ranked Top 1% among 180,000 Participants in the Nationwide University Entrance Exam for B.Sc. in the Field of Mathematics and Physics

 Jul 2014
- ❖ Achieving the 1st position in the RoboCup Competition (IranOpen) Mar 2012

ACADEMIC PROJECTS

• QoE Maximization in Mobile Edge Computing

SUT, 2021

Optimizing Decision-Making for Computation Offloading in Mobile Edge Computing using Deep Reinforcement Learning (Dueling Deep Q-Networks) Supervisor: Prof. Ali Movaghar and Dr. Hamed Shah-Mansouri

• Mobile Edge Computing Environment

SUT, 2021

Modeling and Simulation of Mobile Edge Computing under Resource Constraints for Delay and Energy Optimization \bigcirc Supervisor: Prof. Ali Movaghar

• Time Series Analysis

SUT. 2021

Design a Model for forecasting Edge Server Workload using Recurrent Neural Networks such as Long Short Term Memory \bullet Supervisor: Prof. Ali Movaghar

• Computer Performance Evaluation

SUT, 2020

Simulation and Performance Analysis of M/M/1/K Queue Model with Varied Service Orders (FCFS, Processor Sharing, Discriminatory Processor Sharing) \bullet Supervisor: Prof. Ali Movaghar

• Distributed Systems

SUT, 2019

A Survey on 'Verification of Paxos and Raft Protocols in Distributed Consensus' Supervisor: Dr. Mohammad Izadi

• Industrial Facilities Planning

KNTU, 2018

Operational Sequence of Activities (Material Flow) and Establishment of Industrial Units in the Process of Gears Manufacturing in an Automaker Company Supervisor: Dr. Donya Rahmani

• Project Management and Control

KNTU, 2017

Scheduling, Time management and Resource Allocation in a Construction Project Supervisor: Dr. Amir Abbas Najafi 🗷

SELECTED COURSES

Theory of Distributed Systems Verification of Reactive Systems Advanced Computer Networks Mobile Communications Computer Performance Evaluation Wireless Networking Advanced Network Security Computer Network Management

SKILLS

REFERENCES

Prof. Ali Movaghar

movaghar@sharif.edu

Professor of Computer Science and Engineering Department, SUT

Visiting Professor of Computer Science Department, University of Michigan

Dr. Hamed Shah-Mansouri ♂

hamedsh@sharif.edu

Assistant Professor of Electrical Engineering Department, SUT

Prof. Ali Mohammad Afshin Hemmatyar 🗷

hemmatyar@sharif.edu

Professor of Computer Science and Engineering Department, SUT

Dr. Mahdi Dolati

mahdidolati@ut.ac.ir

Postdoctoral of Institute For Research In Fundamental Sciences Researcher (IPM)

Dr. Mohammad Hosseini 🗷

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Further information and Proofs are available upon Request.