In the name of Allah, the Most Gracious, the Most Merciful

Aseman Manzar, Mohammad Mohsen

PERSONAL DETAILS

Birth	February 10, 1996
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EDUCATION

PhD in Computer Engineering, Software   `2020-present`

Sharif University of Technology
> **Supervisor:** Dr. Mohammad Izadi

MSc. in Computer Engineering, Software   `2018-2020`

Sharif University of Technology
> 19.15 GPA
> **Project:** Big Data Application Performance Prediction and Cost-based Heterogeneous Resource Recommendation in Cloud
> **Supervisor:** Prof. Ali Movaghar

BSc. in Computer Engineering, Software   `2014-2018`

Iran University of Science & Technology
> First Rank, 18.76 GPA
> **Project:** Mixed Performance and Power Consumption Modeling in Virtual Machine Using Coloured Petri Nets
> **Supervisor:** Dr. Mohammad Abdollahi Azgomi

Diploma, Mathematics & Physics   `2010-2014`

Allameh Tabatabai School

WORK EXPERIENCE

iOS/Backend/WebApp Developer   `2016-present`

Hooshravan
> HooshRavan was born at March 2016 and now the main focus is on "Smart Home Devices". In the market side, The products are known by Hinava brand.

Client/Server Developer   `2014-2019`

Elmogame Game Studio
> Elmogame studio is a game studio founded by Iran University of Science and Technology students in 2013.

iOS Developer   2015-2016

Hamayeh RnD

> Hamayeh was established in 1995, originally aiming at Automation of Control Systems and in less than 5 years of hard work and experience managed to become the major manufacturer of a wide range of different lighting systems equipment.

TEACHER ASSISTANT

Verification of Reactive Systems   Spring 2020

Prof. Ali Movaghar

> Book: Principles of model checking *written by C. Baier & JP. Katoen*

Principles of Computational Intelligence   Spring 2018

Dr. Naser Mozayeni

Advanced Programming   Spring 2016

Dr. Adel Torkaman Rahmani

Fundamental of Computer Programming   Fall 2015

Dr. Adel Torkaman Rahmani

SELECTED COURSES

Advanced Programming	20
Discrete Mathematics	20
Data Structures	20
The Theory of Formal Languages and Automata	20
System Analysis and Design	20
Software Engineering	19
Operating Systems	19.6
Artificial Intelligence and Expert Systems	20
Computer Networks	17.7
Formal Methods in Software Engineering	20
Object-Oriented Analysis and Design	19.6
Formal Specification and Verification of Programs	19.0
Computer System Performance Evaluation	19.3
Theory of Distributed Systems	19.7
Algorithmic Game Theory	19.5
Semantic Web	20

PUBLICATION

Big Data Application Performance Prediction and Cost-based Heterogeneous Resource Recommendation in Cloud   Writing

Mohammad-Mohsen Aseman-Manzar, Soroush Karimian-Aliabadi, Reza Entezari-Maleki and Ali Movaghar

Fixed-point Iterations Approach to Spark Scalable Performance Modeling and Evaluation `Under review`

Soroush Karimian-Aliabadi, Mohammad-Mohsen Aseman-Manzar,
Reza Entezari-Maleki, Danilo Ardagna and Ali Movaghar
> Journal of IEEE Transactions on Cloud Computing

Designing a platform for analysing games' users' data and classification of essential metrics (in persian) `2017 Nov.`

Mohammad-Mohsen Aseman-Manzar, Sarah Aseman-Manzar and Behrooz Minaei
> 1st Digital Games Research Conference (DGRC), https://civilica.com/doc/696919

PROJECT

MSc. Project `2018-2020`

Supervisor: Prof. Ali Movaghar
> Project Title: Big Data Application Performance Prediction and Cost-based Heterogeneous Resource Recommendation in Cloud
>
> `Spark` `Hadoop 2.x, 3.x` `Yarn` `Performance Prediction` `TPC-DS Benchmark`

BSc. Project `2017-2018`

Supervisor: Dr. Mohammad Abdollahi Azgomi
> Project Title: Mixed Performance and Power Consumption Modeling in Virtual Machine Using Coloured Petri Nets
>
> `CPN-Tools` `ML Language` `Performance Modeling` `Power Consumption Modeling`

Hinava Smart Home `2016-present`

iOS/Backend/WebApp Developer
> Hinava is a smart home system developed in Hooshravan company in Iran. It is one of the first and best manufacturers of smart home systems in the country. The system in Hinava smart home includes three parts; Hardware devices, Hinava cloud service, and mobile applications. The devices include a central panel which acts as a gateway to our system. other devices like sensors and actuators are connected to the central panel and through it, they connect to user's app on smartphones or tablets.
>
> (iOS: `Swift`) (WebApp: `React`) (Backend: `Docker` `Docker Swarm` `CockroachDB` `Redis` `Openresty` `HAProxy` `Golang` `Python` `Kibana` `Elasticsearch` `Grafana` `Prometheus`)

Kalanshahr Game `2016-2020`

Backend Developer
> Kalanshahr is an online strategy game that each player should manage his/her city by choosing appropriate defensive strategies to avoid rubbery. Each player will build his/her own city and players are usually able to walk around the other players' cities to become aware of their status. Players are also able to watch the inner view of the building in the cities.
>
> `Docker` `PostgreSQL` `Redis` `Python`

Footyard Game `2015-2017`

Unity3D Developer (Physics, Gameplay, AI, etc.)
> Footyard is an online football management game with online gameplay. Each player will have his/her own team and he/she is responsible for his/her team management. It is also possible to find friends and hang out with them.

Unity3D   C#   RabbitMQ

Gametic - A Game Analytics Tool   2016-2017

Product Manager, Backend Developer

Gametic is an analytics tool that specialized for games. Gametic supports many analytics reports in a user-friendly web-based dashboard in two categories of user reports and financial reports. user reports such as daily active users, users retentions and sticky factor. financial report such as ARPU, LTV, Paid Rate. The major technologies we used was Golang (gin framework), Redis and MongoDB (sharded cluster) for big data handling.

Docker   MongoDB (sharded cluster)   Redis   Nginx   Golang   Gin Framework   Python

Farmuler Game   2015-2016

Unity3D Developer (Online Gameplay)

Farmuler is an online multiplayer farm game, that publishes for Android devices. Farmuler has two parts included online multiplayer and offline single player. In the offline part, 120 levels are designed and divided into 4 seasons of a year. Players should achieve each level goal at the proper time and they have to demonstrate their skill of time management and resource management to approach the aims. Players will be rewards as they get to the goals sooner.

Unity3D   C#   Websocket

SKILL

Languages	PERSIAN (MOTHER TONGUE) ENGLISH (LIMITED WORKING PROFICIENCY)
Programming Languages	C#, PYTHON, SWIFT, GO, JAVA, JAVASCRIPT, SQL, C/C++
Data Stores	REDIS, POSTGRESQL, MONGODB, COCKROACHDB
Industry Knowledges	BACKEND, iOS, GAME DEV., WEB DEV., DATABASE DESIGN
Web Frameworks	FLASK, DJANGO, GIN, REACT
Other Softwares	DOCKER, GIT, UNITY3D, CPN-TOOLS