## Shahryar Soltanpour

CONTACT INFORMATION

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Personal Information

Birthday: May  $8^{th}$ , 1997

FIELDS OF INTEREST

Software Engineering

Big Data

#### University of Tehran, Tehran, Iran

Bachelor of Science in Software Engineering

• GPA: 17.43/20

• last year GPA: 18.59/20

• Selected courses (out of 20):

• Internet Engineering: 20

• Network Security: 20

• Introduction to Cryptocurrency: 20

 $\bullet\,$  Software Engineering: 19.2

• Software Testing: 19.1

• Advanced Software Design: 18.33

• Design and Analysis of Algorithms: 19.1

• Formal Methods in Software Engineering: 18.6

• Compiler Design and Implementation: 18.5

• Theory of Formal Languages and Automata: 19.25

## EDUCATION

#### Allame Helli 1 School

Diploma in Mathematics and Physics Discipline

• GPA: 19.91/20

2008 - 2015

Sep. 2015 - Jun. 2020

#### RESEARCH EXPERIENCE

• Undergraduate Research(Jul. 2019 - Oct. 2019):

# Real-time verification and evaluation of algorithms efficiency in distributed actor based systems

Using java language to compile and run Rebeca codes with different policies and measure some metrics to find the best algorithm.

Rebeca (Reactive Objects Language) is an actor-based language with a formal foundation, designed in an effort to bridge the gap between formal verification approaches and real applications. It can be considered as a reference model for concurrent computation, based on an operational interpretation of the actor model. It is also a platform for developing object-based concurrent systems in practice.

Under supervision of Dr. Fatemeh Ghassemi.

### • Blockchain, CryptoCurrency and Digital Currencies

I've passed *Introduction to Cryptocurrency* course as my master's degree course and I got the mark 20/20. During this course, I studied several essays about Bitcoin, Ethereum and blockchain and did some computer assignments to use make Bitcoin transactions in P2PKH and P2SH modes and broadcast them to the blockchain. I also did some computer assignments to make a simple application using Solidity, web3.js and Truffle framework in order to deeply understand smart contracts.

Under supervision of Dr. Behnam Bahrak.

#### Honors and Awards

Ranked  $241^{st}$  (regional rank), and  $368^{th}$  (national rank) in the National Universities Entrance Examination among more than 318,000 contestants, 2015

Ranked  $3^{rd}$  among Undergraduate Students in Software Engineering College and winner of FoE (Faculty of Engineering) prize, University of Tehran (2015-2017)

#### Professional Experience

## Software Engineer at Divar(Aug. 2019 - Dec. 2020):

Divar is the leading application for online classified ads, and one of the most prominent Iranian companies in Information Technology, having more than 40 million users.

My main responsibilites during my career are listed below:

- Designing system for new features, by writing 'design docs' and implementing them.
- Maintaining services. As the owner of some services, I had to make sure that my services are functioning properly 24/7.
- Member of interview comittee. Attending interview with new people who wanted to enter the company, and helping the company hire the best software engineers.

## Software Enginner at Pegah Co. (known as Tapsell)(Sep. 2017 - Aug. 2019):

Tapsell is the leading company in the online advertising industry in Iran.

Mediaad (Jun2018-Aug. 2019) During my experience in Mediaad, I implemented a video player platform, helping website owners to upload and stream their video files, see statistics for each video and also earn money by showing advertisements. I also implemented the dashboard of this platform using Angular 6.

I also implemented some features in Mediaad platform, such as retargeting feature. I worked with Spring Boot and Kotlin and I got to work with big data processing tools such as Kafka streams, Elastic Search, Cassandra DB and I got familiar with Apache Spark.

Backtory(Jan2018-Jun2018) Backtory is a CDN, storage and streaming service provider startup. During my experience in Backtory, I worked with Spring Boot framework using Kotlin as the programming language and I became skilled in them. I also learned and worked with HAProxy and Nginx as web servers and load balancers.

## Software Engineering Intern at Rahnema College (July 2017-Aug. 2017):

In this cycle of Rahnema College our team launched Unagi, a location based social network application. In this project, I focused on iOS and Android application development using React-Native and React-Redux and I also focused on server-side development using Node. JS Express framework. This project gave me a chance to get to know and apply the Scrum methodology and Git VCS.

#### NOTABLE PROJECTS

- Implement a bitcoin client to make bitcoin transactions in both P2PKH and P2SH modes using Python and Bitcoin library.
- Implement Splitwise application using smart contracts using technologies such as Truffle, Solidity language and web3.js
- Implement a compiler for an actor based language named Atalk in compiler design course
- Implement a web-based job offering application for Internet Engineering course. Using Java for back-end and React for front-end development.
- Backend development of judge website in ACM Data Analysis Contest (held by Tap30) using Laravel framework.

## TEACHING ASSISTANTSHIP

Internet Engineering

Spring 2020

Instructor: Dr. Ehsan Khamespanah

Chief TA of the course. Responsible for managing all course projects to be designed, delivered and graded.

Systems Analysis and Design

 $\mathbf{Spring}\ \mathbf{2019}$ 

Instructor: Dr. Fatemeh Ghassemi

Chief TA of the course. Responsible for managing course projects, quizzes and homeworks.

## Compiler Design and Implementation

Fall 2018

Instructors: Dr. Fatemeh Ghassemi and Dr. Hosein Hojjat Responsible for designing main project of the course in 4 phases.

Artifical Intelligence Spring 2019

Instructor: Dr. Mohammad Amin Sadeghi

Responsible for designing a computer assignment for students to become familiar with naive Bayes and Bayesian network.

## Design and Analysis of Algorithms

Fall 2017

Instructor: Dr. Hamid Mahini

Responsible for designing a homework about complexity of algorithms.

## Theory of Formal Languages and Automata

Fall 2017

Instructor: Dr. Hakimeh Fadaei

Responsible for designing two homeworks about regular expressions and pushdown automatons.

## **Engineering Statistics and Probability**

Fall 2017

Instructor: Dr. Behnam Bahrak

Responsible for correction of a homework about conditional probability.

## Data Structure and Algorithms

Spring 2018

Instructor: Dr. Fathieh Faghih

Responsible for designing a computer assignment about basic data structures and implementing them.

## Data Structure and Algorithms

Fall 2017

Instructor: Dr. Hesham Faili

Responsible for designing a computer assignment about graphs, DAGs and trees.

## LANGUAGE SKILLS

Persian: Native English: Advanced

#### Software

## Programming:

SpringBoot: 4/5Kotlin: 4/5Java: 4/5

KafkaStreams: 3/5

NoSQLs(MongoDB, Cassandra, Redis): 3/5

ElasticSearch: 3/5

MySql:3/5 Docker: 2/5 Antlr: 3/5

Apache Spark: 1/5 Angular: 2.5/5 C, C++: 3/5 Javascript: 4/5 Python:3/5 Django: 3/5 Golang: 2/5 ran 2010

HTML,CSS: 2/5

React, React Native, React Redux : 3/5

Node.JS: 2/5

Agile Methodology : Scrum Simulation: Multisim, Modelsim, Quartus II, Pspice, Logic Gate Simulator