

COMPUTER ENGINEERING · STUDENT

🛮 (+98) 933-588-8339 | 🗷 soheil.zibakhsh@gmail.com | 🏕 soheilzi.github.io | 🖸 soheilzi | 🤡 soheilzi | 🐧 live:soheil.zibakhsh

### Education

University of Tehran Tehran, Iran

**B.S. IN COMPUTER ENGINEERING** 

2018 - Exp. 2022

• GPA of 95.4/100

Relevant Courses: Crypto Currency(100/100) - Advanced Programming(100/100) - Data Structures(100/100) - Operating Systems(99/100) - Probability and Statistics(100/100) - Artificial Intelligence(98/100) - Database Design(99/100) - Algorithms Design(90/100)

Allame Helli Tehran

Tehran, Iran

DIPLOMA IN MATHEMATICS AND PHYSICS GPA: 96.6/100

2014 - 2018

• As a part of the National Organization for Development of Exceptional Talents (NODET)

### Research Interests

- Blockchain technology
- · Algorithm design
- Theoretic computer science
- Data analysis and Data mining

- Graphs and mathematics
- Operating systems and distributed systems
- Statistics process and optimization
- Artificial intelligence

### Skills\_\_\_\_

**Programming** Python, C/C++, SQL, JAVA, Verilog, Solidity

**Technology** Blockchain, Ethereum, Lightning Networks, Git, Jupyter Notebook, Oracle

**Operating Systems** Linux(Ubuntu), Microsoft Windows

### Experience \_\_\_\_\_

#### Research assistant on bitcoin lightning networks

University of Tehran Science and Technology Park

Jan. Apr 2021 - PRESENT

University of Tehran Data Lab

- Conducting a research on the evaluation of Bitcoin Lightning Networks.
- The research is being done under the supervision of Dr.B.Bahrakand Dr.P.Shariatpanahi

#### **Teaching assistant in Advanced Programming**

University of Tehran

Jan. 2020 - PRESENT

 $\bullet \ \ \text{Responsible with designing and implementing and grading projects and assignments and exams.}\\$ 

#### Teaching assistant in Engineering Probability and Statistics

University of Tehran

2020

• I was responsible with designing and grading homework assignments and helping student if needed

### Intern in Multi Media Lab

University of Tehran

summer 2019

• Tried to develop a test bench for testing video streaming using mininet.

#### **Apex Developer and designer**

Shazand Petro Chemical

Jan 2020 - 2021

• Developing and designing the system for load and unload using oracle apex.

#### **Honors & Awards**

**Ranked first at the University of Tehran**, My current GPA is 95.4. In addition, I am the first rank in all students.

2017 **Silver medal**, Silver Medal in the 30th Iranian National Olympiad in physics.

2018 **Ranked**, Top 0.6% national-wide university entrance exam

2017 **Becoming a member**, becoming a member of Iran's National Elites Foundation(NODET)

**Scholarship**, Received scholarship from the University of Tehran Sponsors Foundation as an exceptional

talent student.

## Remarkable Academic Projects \_\_\_\_\_

Blockchain Splitwise (https://github.com/soheilzi/Blockchain-Splitwise)

A PROJECT ON DESIGNING AND IMPLEMENTING ETHEREUM SMART CONTRACTS.

Crypto Currency Course

 $\textbf{Sophia Compiler} \big( \texttt{https://gitlab.com/soheilzi/compiler\_p4/-/tree/master} \big)$ 

A COMPILER FOR NEW OBJECT ORIENTED LANGUAGE CALLED SOPHIA.

Compiler design Course

XV6 OS(https://gitlab.com/Shayunak/os-lab5)

MODIFIED SYSTEM CALLS, CPU SCHEDULING, MEMORY MANAGEMENT, SHORTCUTS, SYNCHRONIZATION AND CONCURRENCY..

Operating Systems Course

Multithread Price Estimator (https://gitlab.com/soheilzi/os-project3)

USING MULTITHREADING TO SPEED UP ESTIMATOR IN C++.

Operating Systems Course

Image Classifier (https://github.com/soheilzi/Image-classifier)

TWO PROJECTS ONE MAKING A NN GROUND UP, ONE USING TENSORFLOW.

Artificial Intelligence Course

Computer Networks Course

Two Layer Switch Network (https://github.com/soheilzi/twolayer\_switch\_simulator)

IMPLEMENTING A SWITCH NETWORK WITH IPC AND MULTITHREAD PROGRAMMING.

compater networks course

Dots and Boxes Over Localnet (https://gitlab.com/soheilzi/dots-and-boxes)

A SERVER THAT CREATES GAMES OF 2 TO 4 PLAYERS OVER LOCALHOST WITH UDP AND TCP.

Operating Systems Course

Mips Pipeline Processor (https://gitlab.com/soheilzi/computerarchitecture\_project4)

A PIPELINE PROCESSOR WAS FULLY DESIGNED AND IMPLEMENTED USING VERILOG.

Computer Architecture Course

# Languages \_\_\_\_\_

**English** Professional working proficiency - TOEFL: 113/120 [R:30, L:30, S:29, W:24]

**Deutch** Beginner **Persian** native

### **Current Activities**

I am currently working on a research project regarding Bitcoin Lightning Networks. In this project, we have developed a new graph centrality measure, which is directed at the concept of lightning networks to predict the success rate of the network by just knowing the topology.

### References\_\_\_\_\_

· Available upon request