

Soheil Zibakhsh

COMPUTER ENGINEERING · STUDENT

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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, Shellsript

Technology Blockchain, Ethereum, Lightning Networks, ML, Git, Jupyter Notebook, Oracle, Makefile

Operating Systems Linux(Ubuntu), Microsoft Windows

Experience

Research assistant on bitcoin lightning networks

University of Tehran Science and
Technology Park

UNIVERSITY OF TEHRAN DATA LAB

Jan. Apr 2021 - PRESENT

- Conducting a research on the evaluation of Bitcoin Lightning Networks.
- The research is being done under the supervision of [Dr.B.Bahrak](#) and [Dr.P.Shariatpanahi](#)

Teaching assistant in Advanced Programming

University of Tehran

UNDER SUPERVISION OF [DR.R.KHOSRAVI](#)

Jan. 2020 - PRESENT

- Responsible with designing and implementing and grading projects and assignments and exams.

Teaching assistant in Database and systems

University of Tehran

UNDER SUPERVISION OF [DR.A.SHAKERY](#)

2021- PRESENT

- I am responsible with designing and grading homework assignments and helping students if needed

Teaching assistant in Engineering Probability and Statistics

University of Tehran

UNDER SUPERVISION OF [DR.B.BAHRAK](#)

2020

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

Intern in Multi Media Lab

University of Tehran

UNDER SUPERVISION OF [DR.HASHEMI](#)

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.

Publications

I am currently working on a research project regarding Bitcoin Lightning Networks. In this paper, 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.

Honors & Awards

- 2018-2021 **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)
- 2018 **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

2021

Sophia Compiler(https://gitlab.com/soheilzi/compiler_p4/-/tree/master)

A COMPILER FOR NEW OBJECT ORIENTED LANGUAGE CALLED SOPHIA.

Compiler design Course

2020

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

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

Operating Systems Course

2020

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

USING MULTITHREADING TO SPEED UP ESTIMATOR IN C++.

Operating Systems Course

2020

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

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

Artificial Intelligence Course

2021

Two Layer Switch Network(https://github.com/soheilzi/twolayer_switch_simulator)

IMPLEMENTING A SWITCH NETWORK WITH IPC AND MULTITHREAD PROGRAMMING.

Computer Networks Course

2021

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

2020

Mips Pipeline Processor(https://gitlab.com/soheilzi/computerarchitecture_project4)

A PIPELINE PROCESSOR WAS FULLY DESIGNED AND IMPLEMENTED USING VERILOG.

Computer Architecture Course

2020

Languages

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

References

- Available upon request