Navid Akbari

Curriculum Vitae

Education

- 2021–Present M.Sc. in Computer Science, Faculty of Science, University of Calgary, Calgary, Canada.
 - GPA: 4/4
 - 2016–2020 **B.Sc. in Engineering Science**, *Department of Engineering Science*, Faculty of Engineering, University of Tehran, Tehran, Iran.
 - $\circ~$ Overall GPA: 18.35/20~ (1st Rank among all the students of the Department)
 - 2013–2016 High School Diploma in Mathematics and Physics, Emam Sadegh High School, Tehran, Iran.
 - o Overall GPA: 19.59/20

Research Interests

- Computer Networks
- Cloud Computing
- Distributed Systems
- Software Defined Networking

Awards and Honors

- 2016–2020 Ranked 1st among all of Engineering Science student, University of Tehran
 - 2019 **Received scholarship** from the University of Tehran Sponsors Foundation as an exceptional talent student
- 2017 2019 Received scholarship from Faculty of Engineering as an exceptional talent student
- 2017 & 2019 F.O.E (Faculty of Engineering) award: Ranking 1^{st} among all of Engineering Science students, University of Tehran
 - 2018 **F.O.E (Faculty of Engineering) award:** Ranking 2^{nd} among all of Engineering Science students, University of Tehran
 - 2016 Admission to University of Tehran*
 - * University of Tehran is the oldest, largest and most prestigious university of Iran.

Teaching Experience

Winter 2021	Teaching Assistant	"CPSC	233"

Instructor: Dr. J. Tam, University of Calgary

Spring 2020 Teaching Assistant, "Internet Engineering"

Instructor: Dr. E. Khamespanah, University of Tehran

Fall 2019 - Teaching Assistant, "Computer Networks"

Spring 2020 Instructor: Dr. A. Khonsari, University of Tehran

Fall 2019 - Teaching Assistant, "Operating Systems and Lab"

Spring 2020 Instructor: Dr. M. Kargahi, University of Tehran

Fall 2019 Teaching Assistant, "Numerical Analysis Methods 1"

Instructor: Dr. H. M. Darian, University of Tehran

- Spring 2019 Teaching Assistant, "Engineering Economics" Instructor: Dr. A. Kamandi, University of Tehran
 - Fall 2018 Teaching Assistant, "Data Structures"
 Instructor: Dr. A. Kamandi, University of Tehran
 - Fall 2018 Teaching Assistant, "Systems Analysis"
 Instructor: Dr. S. Mirzai, University of Tehran
 - Fall 2017 Teaching Assistant, "Introduction to Computer and Programming" Instructor: A. Javan, University of Tehran

Work Experience

Sep. 2020 - Software Enginner at Pegah Co. (known as Tapsell), Tehran, Iran.

and helped for debugging android application for the project.

- Nov. 2020 Tapsell is the leading company in the online advertising industry in Iran. I am working in the front-end chapter and helping to do some beneficial projects for all the company teams.
- Summer 2019 Internship at Parto Negar Persia Co. , *Tehran*, Iran.

 Contributing to the research and development of one of the company projects. Also, I developed a web page
- Summer 2018 Research Center, University of Tehran, Tehran, Iran.

 Connecting the NodeMCU ESP8266 module to the flowmeter module and sending its data via the Internet and HTTP to the server and save it to the MySQL database.

Selected Academic Projects

- Spring 2020 **Implementation** of seven projects on different artificial intelligence topics such as Search Algorithms, Genetic Algorithms, Classification, Multi-layer Neural Networks, and Regression. All these projects were implemented in Python and Jupyter Notebook Advisor: Dr. H. Fadaei, Artificial Intelligence Course
- Spring 2020 **Implementation** of a simple version of channel coding using Huffman algorithm and source coding using Convolutional encoding in Python Advisor: Dr. P. Shariatpanahi, Data Transmission Course
- Spring 2020 **Simulation** of a wireless sensor network probability of connection in different area and node size and analysis of percolation phenomenon in Matlab
 - Advisor: Dr. P. Shariatpanahi, Introduction to Wireless Networks Course
 - Fall 2019 **Development** of a web application for "Meeting Management System" using Django for backend, React for frontend
 - Advisor: Dr. R. Khosravi, Software Engineering Course
 - Fall 2019 **Implementation** of GHS distributed algorithm for finding the minimum spanning tree in a graph by using the Kompics framework and Java
 - Advisor: Dr. F. Faghih, Distributed Systems Course
 - Fall 2019 **Implementation** of MapReduce distributed algorithm for counting the number of each word in the given file by using the Kompics framework and Java Advisor: Dr. F. Faghih, Distributed Systems Course
- Spring 2019 **Implementation** of a virtual IP network supporting dynamic routing and forwarding with traceroute command using C++ Advisor: Dr. A. Khonsari, Computer Networks Course
- Spring 2019 Implementation of some TCP New Reno features over UDP using Java
 - Advisor: Dr. A. Khonsari, Computer Networks Course
- Spring 2019 **Implementation** of a proxy server compatible with HTTP 1.0 using Python Advisor: Dr. A. Khonsari, Computer Networks Course
- Spring 2019 **Implementation** of a BitTorrent system with custom network topology using Mininet virtual machine and Python

Advisor: Dr. A. Khonsari, Computer Networks Course

Spring 2019 **Development** of a web application for "Occupation Finding System" using java, web languages, and MySQL for Database

Advisor: Dr. E. Khamespanah, Internet Engineering Course

Fall 2018 **Development** of new features on xv6 operating system in 5 phases

Advisor: Dr. M. Kargahi, Operating Systems Course

Fall 2018 Implementation of a Battleship game using socket programming in C

Advisor: Dr. M. Kargahi, Operating Systems Course

Fall 2018 **Implementation** of a multithreaded neural network using pthread and semaphores in C++

Advisor: Dr. M. Kargahi, Operating Systems Course

Fall 2018 Simulation of solar system using n-body problem approach using Matlab

Advisor: Dr. H. Darian, Numerical Analysis Methods 1 Course

Spring 2018 Implementation of image noise reduction and image compression with Huffman Coding and Zig-Zag

pattern using Matlab

Advisor: Dr. A. Adhami, Systems Analysis Course

 $Spring\ 2017 \quad \textbf{Design and Implementation}\ of\ a\ graphical\ client/server\ taxi\ reservation\ system\ using\ C++\ and\ Qt$

n 3 phases

Advisor: Dr. R. Khosravi and Dr. M. Sadeghi, Advanced Programming Course

Technical Skills

Programming Python, C/C++, Java, JavaScript, MATLAB, SQL

Web/DB HTML, CSS, Bootstrap, NodeJS, ReactJS, Angular, Docker, MySQL

Technologies

 $Tools \quad \text{Git}, \LaTeX, \text{ WireShark, Mininet, Kompics, Alloy, IntelliJ IDEA, Visual Studio Code, DataGrip, Postman, Alloy, IntelliJ IDEA, Visual Studio Code, DataGrip, Postman, Mininet, Mininet,$

Simulink, MS Word, MS Excel, MS Powerpoint

Operating Mac OS, Microsoft Windows, Linux(Esp. Ubuntu, Kali)

Systems

Volunteering and Activities

2021-Present Vice president Internal of Computer Science Graduate Society

2017–2019 Member of Student Association of Engineering Science

Fall 2017 **Member of** executive of the 3rd Engineering Science Conference

Languages Skills

Persian: Native English: Fluent

IELTS scores: Overall 7.0 (Listening: 8.5 - Reading: 7.0 - Speaking: 6.5 - Writing: 6.0)

Arabic: Only Reading

References

Excellent references are available upon request