# Navid Akbari

## Curriculum Vitae

☐ (+1) 4034378493 ☐ navid.akbari@ucalgary.ca linkedin.com/in/navid-akbari/ ☐ github.com/navidakbari

#### Education

- 2021-Present M.Sc. in Computer Science, Faculty of Science, University of Calgary, Calgary, Canada
  - O GPA: 4/4
  - O Supervisors: Dr. Mea Wang and Dr. Diwakar Krishnamurthy
  - O Thesis: iStream platform, a flexible container-based multimedia streaming application
  - 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)

#### Research Interests

- Cognitive Neuroscience
- Machine Learning
- Signal Processing
- Cloud Computing

#### Awards and Honors

- Fall 2022 Faculty of Graduate Studies International Master's Scholarship from Graduate Award Competition, University of Calgary - Amount: CAD 10,000
- Fall 2022 International Graduate Student Recruitment Award from Faculty of Computer Science, University of Calgary Amount: CAD 2,000
- Winter 2022 **Departmental Research Assistant Award** from Faculty of Computer Science, University of Calgary Amount: CAD 11,000
  - 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<sup>st</sup> among all of Engineering Science students, University of Tehran

## Teaching Experience

- Fall 2021 Fall Teaching Assistant, "Explorations in Information Security and Privacy"
  - 2022 Instructor: Dr. R. Henry, University of Calgary
  - Winter 2021 Teaching Assistant, "Introduction to Computer Science for Computer Science Majors II" 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" 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
- 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 and helped for debugging android application for the project.
- 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 2021 **Implementation** of five projects on different machine learning topics such as Image Classification with CNN and FCN, Auto-encoder model to denoise an image dataset, U-net model for signal denoising, RNN model to predict new daily cases of COVID-19 in Python and Jupyter Notebook Advisor: Dr. R. Souza, Data Mining and Machine Learning
- Spring 2021 **Classification** of Driving Behaviours Based on Deep Learning Algorithms like CNN and LSTM Advisor: Dr. R. Souza, Data Mining and Machine Learning
- 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
  - 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 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 **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

#### Technical Skills

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

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

**Technologies** 

Tools Git, LATEX, WireShark, Mininet, Kompics, Alloy, IntelliJ IDEA, Visual Studio Code, DataGrip, Postman,

Simulink, MS Word, MS Excel, MS Powerpoint

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

Systems

## Volunteering and Activities

2022-Present President of Persian Gulf Club Association in University of Calgary

2021–2022 Vice president Internal of Computer Science Graduate Society

2017–2019 Member of Student Association of Engineering Science

Fall 2017 Member of executive of the 3<sup>rd</sup> 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