

# Saeed Kazemi

## Curriculum Vitæ

Fredericton, NB, Canada  
☎ +1 (873) 552-1235  
✉ Saeed.Kazemi@unb.ca  
📁 skazemii.github.io  
🌐 SKazemii

### Summary

- Strong foundation in machine learning and computer science principles
- Experience in developing and implementing machine learning and deep learning models
- Proficient in programming in Python and experience with popular libraries such as TensorFlow, Pandas, and scikit-learn
- Experience in data preprocessing, feature selection, and model evaluation
- Team player attitude with a strong desire to stay up-to-date

### Skills

Advanced Git, Python, Pandas, TensorFlow, Scikit-learn, OpenCV, Altium,  
Intermediate VHDL, L<sup>A</sup>T<sub>E</sub>X, Matlab, C/C++, Linux, Adobe Photoshop

### Work Experience

#### Vocational

- 2020-2023 **Research Assistant**, *UNIVERSITY OF NEW BRUNSWICK*, Fredericton, NB, Canada.
- Worked as part of a team on a federally funded, multi-partner project to develop the world's first pressure-based gait biometric system
  - Utilized various techniques such as pre-processing, feature extraction, and hyperparameters optimization to enhance the performance of the models
  - Implemented deep neural networks, including CNN, 1DCNN, and transfer learning techniques
  - Experience in working with Keras, Tensorflow, and scikit-learn libraries to build ML/DL models
- 2015-2017 **Electronic Engineer**, *SALMANIAN FARS CORPORATION*, Imam Khomeini highway, Isfahan, Iran.
- Designed and verified PCBs.
  - Worked with a variety of sensors and actuators.
  - Experienced in electronic design and integration.

#### Teaching

- 2023 **Teaching Assistant**, *UNIVERSITY OF NEW BRUNSWICK*, Embedded System.
- 2022 **Teaching Assistant**, *UNIVERSITY OF NEW BRUNSWICK*, Signals and Systems.
- 2014 **Lecturer**, *MOHAJER TECHNICAL AND VOCATIONAL COLLEGE OF ISFAHAN*, Signals and Systems.

### Selected Projects

- 2021 Implementing several approaches for time series classification as the project of "*Time Series Analysis*" course under the supervision of *Prof. Erik Scheme*.
- 2021 Implementing five ML algorithm as the project of "*Machine Learning and Data Mining*" course under supervision of *Prof. Huajie Zhang*.

- 2020 Comparing five algorithms for image registration as the project of "*Digital Image Processing*" course under the supervision of *Prof. Julian Meng*.

## Educational Background

- 2020-2023 **Master of Science in Electronics Engineering**, University of New Brunswick, Fredericton, Canada, *GPA – A+.*  
**Title of Thesis:** *Exploring Performance Limits for Pressure-Based Gait Biometrics*
- 2011-2014 **Master of Science in Communication**, Isfahan University of Technology, Isfahan, Iran, *GPA – A.*  
**Title of Thesis:** *An Efficient Algorithm for Still and Moving Object Registration in Moving Video Camera Sequences*
- 2008–2010 **Bachelor of Science in Electronics Engineering Technology**, Shahid Rajaei Teacher Training University, Tehran, Iran.  
**Title of Thesis:** *Neural Network implementation by NEFPROX in order to approximate nonlinear function to use in medical applications*

## Professional Training

- 2020 **Machine Learning** online course by Stanford University on coursera.org, Instructor: Professor Andrew Ng, Completed in July 2020 ([Credential](#)).
- 2020 **Deep Learning** a 5-course specialization by Deeplearning.ai on coursera.org, Instructor: Professor Andrew Ng, Specialization Certificate earned on August 13, 2020 ([Credential](#)).
- (1) Neural Networks and Deep Learning,
  - (2) Hyperparameter tuning, Regularization, and Optimization,
  - (3) Structuring Machine Learning Projects,
  - (4) Convolutional Neural Networks,
  - (5) Sequence Models
- 2020 **Introduction to Data Science in Python** online course by University of Michigan on coursera.org, Completed in September 2020 ([Credential](#)).

## Publications

- 2023 **Saeed Kazemi**, Angkoon Phinyomark and Erik Scheme, TRANSFER LEARNING FOR FLOOR SENSOR-BASED GAIT RECOGNITION, in preparation.
- 2023 **Saeed Kazemi**, Angkoon Phinyomark and Erik Scheme, SAMPLE SIZE IN FLOOR SENSOR-BASED GAIT RECOGNITION FOR SMART HOME AND ACCESS CONTROL SCENARIOS,
- 2018 **Saeed Kazemi** and M. R. Ahmadzadeh, DPML-RISK: AN EFFICIENT ALGORITHM FOR IMAGE REGISTRATION, International Journal of Engineering (IJE), In Press.

## Volunteer Work

- 2021-2022 **Executive member**, IRANIAN CANADIAN ASSOCIATION OF NEW BRUNSWICK (ICANB), Fredericton, NB, Canada.
- Event planning and organizing for around 100 people
  - Helping newcomer students to easily settle down