# Saeed Kazemi

# MSC | MSEE



# Summary •

- Graduated from UNB, with over 8 years of experience in both industry and academia.
- 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, LATEX, Matlab, C/C++, Linux, Adobe Photoshop

# Work Experience

- 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
  - o 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
- 2022-2023 **Teaching Assistant**, *UNIVERSITY OF NEW BRUNSWICK*, (1) Embedded System, and (2) Signals and Systems.
- 2017-2019 IT Support Specialist, MOEIN RAH GOSTAR KHORASAN COMPANY, Mashhad, Iran.
  - Train and supervise technical and non-technical staff
  - Provide guidance for purchasing of computer hardware, software, and supplies
- 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.
  - 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

- 2023 Master of Science in Electrical Engineering, University of New Brunswick, Fredericton, Canada, GPA A+.
  - Title of Thesis: Exploring Performance Limits for Pressure-Based Gait Biometrics
- 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
- 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 Standford University on coursera.org, Instructor: Professor Andrew Ng, Completed in July 2020 (Credential Link).
- 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 Link).

#### **Publications**

- 2023 Saeed Kazemi, Angkoon Phinyomark and Erik Scheme, Transfer Learning for Floor Sensor-based Gait Recognition, in preparation.
- 2023 Kazemi, S., Phinyomark, A., Scheme, E., Sample Size in Floor Sensor-based Gait Recognition for Smart Home and Access Control Scenarios, 2023 IEEE Sensors Applications Symposium, Ottawa, Canada, Jul 18-20, 2023.
- 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 new international students and immigrants settle in New Brunswick

#### References

References Available Upon Request