# Pedram Ahadi

London Ontario, N6G 3A5

# Education & Accomplishments:

### Lassonde School of Engineering @ York University

Sep. 2017 – April 2021

Honours Bachelor of Science in Computer Science

Toronto, Canada

## Lassonde School of Engineering @ York University

To be decided

Offer of admission to Master's Degree in Computer Science (Artificial Intelligence specialization)

Toronto, Canada

- Summary: Conducted a research project on Wide-Gamut Restoration in Computer Vision & Image Processing.

  Experience in applying Convolutional Neural Networks (CNNs) to various machine learning as well as computer vision challenges. Experienced in Pattern Recognition, Data Mining, Algorithms Design, Linear Algebra, 3D Math, Calculus, Database Systems, Advanced Object-Oriented Programming & Data Structures
  - Experienced with several large scale data sets such as Fashion mnist, LibriSpeech & imageNet.
  - York University Student Scholarship (2015-2018)
  - Got offered a Computer Science Internship through university @ TCE Group Inc (2019)
  - Developed an independent university project, and presented it for the Computer Science committee at York University (2020)
  - Design and implement a personalized Virtual Assistant smart bot funded by ADV Pharmacy (2020)
  - Tensorflow, Keras, Python, Neural Networks, Convolutional Neural Networks, Recurrent Neural Networks and Deep Learning.

# Experience

#### Western University

Sep 2021 – Present Toronto, Ontario.

AI Researcher - Teaching Assistant

Aug 2019 - Present

Toronto, Ontario.

TCE Group Inc.
AI Software Engineer

\* Experience working with modern deep learning architectures such as LSTM and Transformers.

- \* Develop and maintain services to support clients with their analysis and predictions.
- \* Perform pattern recognition on textual as well as multimedia data types to extract knowledge.
- \* Incorporate scripts using Python and Power-Shell in order to create custom functionalities into an organized format and to reuse them when needed.
- \* Implement machine learning models with outputs applicable for improving patients' health and preventing their injuries.
- \* Communicate and present analytical insights to engineers and scientists within the team.
- \* Prove communication skills and ability to work on deliverable independently

# ADV Pharmacy

Feb 2019 - May 2019.

Data Science Intern

Toronto, Ontario.

- \* Extract, transform and load data, through utilizing machine learning and data mining techniques to discover knowledge from raw data.
- \* Hands-On experience with various methods such as Regression and Classification.(Supervised & Unsupervised learning)
- \* Build a solid understanding of common statistical methods and their applications.
- \* Handle ad-hoc client requests for data analysis or model tuning.
- \* Build and deploy predictive models in production at enterprise scale.

#### WSID Network

Feb 2018 - March 2019.

Toronto, Ontario.

Developer

- \* Build cloud-based SaaS/PaaS applications in an efficient, neat, and reusable manner.
- \* Deliver application in a containerized format such as Docker images
- \* Deploy service to Amazon, IBM, Azure and Google Cloud Services.
- \* Collaborate with team members using version control systems such as Git
- \* Maintain a continuous development utilizing automated CI/CD pipelines
- \* Manage a team of 3 employees to follow best practices in a test-driven agile development environment.

Samaras | Data processing / Patenting Agent

- Attending NASA dashboard challenge.
- \* Performing predictive analysis to prevent failure and report diagnostic guides
- \* Introducing methods and implementing models toward optimizing processes.
- \* Developing team bonding sessions to promote team building and get to know staff members
- \* Building data science pipeline from raw logs to cleaned data to models.

Video call app with automated medical Transcription | Javascrip, Python, IBM

Spring 2021

- \* Creating a domain-specific Speech to text application using python and IBM Speech2text API.
- \* Introducing new methods to transcript video call using computer vision and lip reading
- \* Training a speech recognition model with various levels of complexity. (Language model training using various domain-specific corpus, Acoustic model Training through Word2Vec as well as word embedding and Seq2seq
- \* Utilizing test-driven design in modeling to save both on company's budget and time.

Summer 2020

- users get registered and remembered as well as experience a fully personalized interaction with their pharmacy.
  - \* Analysed various machine learning models to find the best model that fits our sample data.
  - \* Defined and developed database schemes that can store user's data in a secure, anonymous ,and efficient manner.
  - \* Used optimization technique to fine-tune available deep learning models for the task in hand.

#### Technical Skills

Familiar with: R, pySpark, C,Java, HTML/CSS, JavaScript, Android Studio, Pytorch, CUDA

Experienced in: Artificial Neural Networks ANN, CNN, RNN/LSTM, DNN, Transfer Learning, Feature extraction, Feature selection, ETL, Bash, Python, Linux, Windows, Command Line, Eclipse, Google, Amazon, IBM Cloud and AI Platforms, MATLAB

Technologies/Libraries: Keras, Scikit-Learn, TensorFlow, Numpy, Pandas, OpenCV, Jenkins, GitHub, pytest, Junit, Regression testing, Docker

## Volunteering

Teaching Assistant

Spring 2020

Cameroon University

African Institute for Mathematical Sciences

- \* Streamed/Lectured Introduction to Machine Learning and its application in real-world problems weekly.
- \* Managed executive board of 5 members and ran weekly meetings to oversee progress in essential parts of the
- \* Taught Python, Keras and TensorFlow, as well as frameworks appropriate for ML modeling and deployment.
- \* Gained experience in grid search and hyperparameter optimization to enhance model accuracy.

Spring 2021