

Amirmehdi Sharifzad

SOFTWARE DEVELOPER · DATA SCIENTIST

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Skills

Programming Proficient in Python, Scala, and C++, familiar with: Java, Swift, MATLAB and octave

Libraries/Tools Git, Unix, TensorFlow, Scikit-learn, Pandas, numpy, scipy, pylab, Azure, Android Studio

Work Experience

PerkinElmer, Innovation Outpost

Kitchener, ON, Canada

SOFTWARE DEVELOPER (ML STREAM)

May 2018 - Aug 2018

- Developed **Deep Neural Networks** to automate predicting clinical outcomes from large scale cancer genomic profiles using **TensorFlow**.
- Worked with the Cancer Genome Atlas Dataset and applied preprocessing and transformations to integrate the data with the model.
- Implemented **multi GPU processing** with cross validation for hyperparameter optimization and training, which reduced the running time by **60 fold** from the original Theano implementation.

University of Waterloo, Department of Statistics

Waterloo, ON, Canada

PART-TIME RESEARCH ASSISTANT

Jan 2018 - Apr 2018

- Researched on **Deep Learning** techniques for **Farsi Context Resolution** in chat-bots.
- Applied **Named-Entity Recognition** and **Part-Of-Speech tagging** on Farsi corpora using **nlTK**.
- Implemented **CNN** based and **seq2seq** models Using **numpy** and **TensorFlow**.

Balute Inc.

Kitchener, ON, Canada

SOFTWARE DEVELOPER

May 2017 - Aug 2017

- Developed an **Android** app from scratch for easing the learning of an electronic Setar and Ukulele.
- Implemented Bluetooth connectivity to capture **MIDI** data from the instrument, and giving **real-time** feedback.
- Parsed Music-XML files using DOM (Document Builder) API, to create an interactive sheet music.
- Implemented pitch estimation to assist with vocal practices.

Projects

Aurora

Jan. 2015 - PRESENT

- Aurora is an **iOS** app developed using **Swift**, **Core ML**, and **Azure Computer Vision API**.
- Aurora integrates voice recognition, voice to text, and computer vision techniques to describe surroundings, recognize and remember faces, read text and take notes for visually impaired people.

ChordProgression

Jan. 2015 - PRESENT

- Developed a program in C++ which takes 6 note names from the user, as a melody line, and another note as the key signature, then suggests a chord progression.

Education

University of Waterloo

Excellent Standing

HONOURS BACHELOR OF COMPUTER SCIENCE (BCS)

Sep. 2016 - Exp. Apr. 2021

- Founder and the President of the Side project Club.

Stanford University

MACHINE LEARNING (COURSERA)

July 2017 - Sept 2017