SALLY MOON

Phone: 1-519-572-3044
E-mail: sallymoon10@gmail.com
Portfolio: http://bysallymoon.me/
Github: https://github.com/sallymoon10

PROFILE

- Extensive technical background in **software and machine learning** algorithm development through Master's research, courses and industrial work experience
- Passionate about **teaching** as shown through consistent tutoring and volunteering

EDUCATION

Master's of Applied Sciences, Biomedical Engineering 09/2019- current
University of Toronto

Research:
- Applying machine learning approaches (eg. random forests, SVMs, multitask-neural networks, etc.) to predict student depression using smartphone sensor data

Relevant courses:
- CSC2515H: Introduction to Machine Learning
- CSC2541H: Topics in Machine Learning: **Machine Learning in Healthcare**

Bachelor's of Applied Sciences, Biomedical Engineering 09/2014 - 04/2019
University of Waterloo, ***Graduated with Distinction***

Relevant courses:
BME 112/ECE406: Data structures and Algorithms, Algorithm design and analysis
SYDE 372: Introduction to **Pattern Recognition** (intro to machine learning algorithms)
SYDE 575: **Image Processing**
SYDE 522: **Machine Intelligence** (introduction to Artificial Intelligence)

PROGRAMMING SKILLS

Languages and tools:
- **Python** (PyTorch, Keras, SkLearn, Pandas, numpy, AllenNLP, Transformers, Snorkel), MATLAB, C#, C++, Java, Javascript , HTML, SQL, git

PROJECTS

Predicting Multiple Sclerosis Severity (MS) with Natural Language Processing (NLP)
St. Michael's Hospital and Dr. Marzyeh at University of Toronto

- Published a **BERT-based language model** optimized for MS prediction, which is downloaded by 500+ users to date (https://huggingface.co/NLP4H/ms_bert)
- Developed state-of-the-art MS severity prediction classifier based on MS-BERT, AllenNLP and Snorkel

WORK EXPERIENCE

Game Developer 05/2018 - 08/2018
Dr. Mihailidis, University of Toronto, Toronto, ON, Canada

- Developed a multitouch game that mitigates symptoms of dementia in older adults
- Directed preliminary research, game concept generation, interface design and game logic development within 4-months, efficiently preparing the game for user testing
- *Skills: Unity (C#), Blender (3D modelling), Adobe Illustrator*

Embedded Systems / Web Application Developer 01/2018 - 04/2018
Braze Mobility, Toronto, ON, Canada

- Developed motion detection algorithms using iMU sensor data to detect unsafe driving patterns (ie. sudden stops, collisions)
- Created a **mobile application** to train powered wheelchair drivers to navigate
- *Skills: MATLAB, React Native, Adobe Illustrator*

Software Developer
Agfa Healthcare, Vienna, Austria 05/2017 - 08/2017
Agfa Healthcare, Waterloo, ON, Canada 09/2016 - 12/2016

- Optimized the efficiency of retrieving and manipulating large medical images
- Skills: Java, Javascript, HTML

Web Application Developer 01/2016 - 04/2016
CI Technologies, Vancouver, BC, Canada

- Designed and deployed a police records analysis web application for on-site use
- *Skills: Java, Javascript, HTML, SQL*

TEACHING

School Teacher Volunteer 11/2019 - current
Ronald McDonald House School, Toronto, ON, CA

- Assist in supervising and teaching sciences and arts, for students in grades k-6 who are currently admitted to the hospital due to serious illness

Private Tutor (Gr. 1-12) 05/2016 - 08/2019

- Independently prepared teaching materials and tutored students in grades 3-11 for math, biology, physics, chemistry and english