# Hooman Ramezani

3A Systems Design Engineering, University of Waterloo

Aspiring software engineer with a diverse skillset of software development and deep learning technologies

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### **EXPERIENCE**

## **Deep Learning Developer** | Applied Brain Research

JAN. 2020 - PRESENT

Tools: Tensorflow, Unreal Engine 4, OpenCV, Python, Keras

- Developed end-to-end ML pipeline for an embedded image classification model
- Built photo-realistic Unreal Engine simulation paired with OpenCV masking for synthetic data-generation, mitigating shortage of real-world data
- Expanded architecture for **convolutional RNN** to process video, incorporating YOLO object-detection, hyperparameter automation, and GPU optimization
- Currently iterating to include temporal processing with goal of 96% accuracy

# Full-Stack Developer | Baron Biosystems

MAY. 2020 - AUG. 2020

Tools: PHP + Laravel, JavaScript, JSON, MongoDB, MySQL, SQL, Jira, Git

- Led projects developing innovative functionality for a PHP web app for analytics
- Leveraged REST API's, custom JSON data, and MySQL backend updates to create platform-wide messaging service
- Implemented enhanced logic on MySQL backend and front-end UI to build 'Profiles' feature for users to have multiple accounts on website

## **SKILLSETS**

- 4+ years exp. w/ Python, C++
- Designing efficient back-end for databases and API's
- Data Engineering, raw-data manipulation for models
- Tensorflow, building models w/ customized architectures

## **EDUCATION**

**Systems Design Engineering** *University of Waterloo* 

#### **Relevant Courses**

- Google ML Crash Course
- Matrices and Linear Systems
- Data Structures & Algorithms
- SYDE 121 C++ with O.O.P.

# Android Developer | reebee Inc.

SEPT. 2019 - DEC. 2019

Tools: Kotlin, React, Java, ORMLite, Node.js, Firebase, Git

- Deployed advanced features on native Android app with over 900k MAU, incorporating Firebase analytics
- Utilized ORMLite to logically structure data and perform powerful queries with SQLite database engine
- Built functionality into reebee **REST API**, implementing throttling for requests to improve api throughput

# **Web Automation Developer** | SAP Canada

**JAN. 2019 - APRIL. 2019** 

• Utilized Python, AWS, SQL to develop automated regression test-suite for SAP HANA database management system

#### **PROJECTS**

# **Titanic Machine Learning Competition** | Kaggle

AUG. 2020

- Trained a **predictive neural network** using gradient descent to classify which passengers would survive, placing in **top 20%** of submissions (Code on Github)
- Optimized performance with feature engineering, accurately filling-in, removing, quantizing and normalizing data

#### Nailed-It | Medical Diagnosis Application

FEB. 2019

- Designed an **image classifier** using **Tensorflow** to perform early-stage diagnosis of oxygen-deprivation illnesses by recognizing discolouration in user's nail
- Awarded **2nd** place in UofT HackXplore hackathon for high level of creativity, feasibility, and intuitive front-end implemented in **React**