# ARYAN MISRA

#### CONTACT

aryanmisra.com

in aryan-misra

aryanmisra

### **EDUCATION**

TOPS @ Marc Garneau Sept. 2017 to Collegiate Institute July 2019

According to Maclean's Magazine, the TOPS Program at Marc Garneau Collegiate Institute is one of Canada's most prestigious math and science programs, offering a university level classroom experience.

AY Jackson Secondary School OSSD 2021 Sept. 2019 to Current

#### **SKILLS**

FRONT END: Javascript, C, React, JavaScript,

HTML/CSS

BACK END: NodeJS, ExpressJS

OTHER: Git, Bash, C++, AWS/Azure, MongoDB,

Mapbox GL

MACHINE LEARNING FRAMEWORKS:

Tensorflow 2.0, Pytorch, Sklearn, Keras

#### **EMPLOYMENT**

#### Skintelligent Pte Ltd.

Machine Learning Developer Intern

Singapore, Singapore Aug. 2019 to Oct. 2019

- Built image preprocessing pipeline and multi-task learning model for Phase 1 deployment using TensorKow 2.0.
- Deployed multi-task image classification model for Chanel Beauty, to be used with a recommendation engine for skincare products.

#### Ascendbuild

Toronto, Ontario

Software Engineer

Mar. 2020 to Current, Mar. 2020 to Current

- Designed and built front-end platform with React and Mapbox GL for 30 beta users.
- Integrated geospatial search algorithm with React front-end and optimized for large geospatial data throughput
- Deployed MERN web app through AWS Elastic Beanstalk to serve over 30 beta users.
- Built process for user to sign up, buy subscription, and use product, utilizing Stripe API, Google Auth, and AWS DynamoDB.
- Created solution to save map state, and share in the form of a unique link.

## **PROJECTS**

Neurascale - Super Resolution GAN built with Tensorflow 2

Jan. 2019

- Winner of Tensorflow 2.0 Hackathon on Devpost.
- Used the (at time) brand-new TF2.0 framework to design and build a Super-Resolution Generative
  Adversarial Network based on the "Photo-Realistic Single Image Super-Resolution Using a Generative
  Adversarial Network" paper published in 2017.

Synbiolic - Al Drug Discovery Platform

Nov. 2019 to Feb. 2020

- Placed top 5 of 28,000 contest in the Microsoft Imagine Cup (North America Finalist)
- Utilized Azure ML Rest APIs to host a Stacked RNN for small molecule generation.
- Used Azure VMs to host MERN web applications serving as front-end for our platform.
- Utilized IBM's RXN framework for retrosynthesis pathway prediction.

#### COURSES

CS50 · Harvard EdX

Dove into the fundamentals of computing, building up basic knowledge of algorithms, data structures. Learned C, C++ in the process.

Introduction to Genomic Technologies  $\cdot$  Coursera (John Hopkins University)

Gives an introduction to modern genomic technologies and experimental tools we use to measure it.

Machine Learning · Coursera (Stanford University)

Completed Andrew Ng's course on Machine Learning (Coursera). This taught me many of the basic concepts, intuition, and theory behind machine learning algorithms.

#### **EXPERIENCES**

DMZ · DMZ Fellow

Toronto, Ontario

Participated in the DMZ Basecamp program as a co-founder of Autophase, an Al assisted tool that aims to help founders save time and focus on priorities by automating the creation of promotional materials and infographics. Received mentorship, guidance, and feedback from founders and investors. Attended various events and workshops to network and learn how to best develop and pitch a product.

Dalla Lana School of Public Health, University of Toronto  $\cdot$  Summer Institute Student Toronto, Ontario

Program designed to introduce students to ideas and issues in public health and healthcare with a multidisciplinary approach to education. Guided by educators specializing in eHealth Innovation at the UHN (University Health Network).