# Ajaybir Singh Randhawa

Ajaybir.Randhawa786@gmail.com | 416-985-3196 | Toronto, Ontario

# Ajaybirrandhawa.github.io | Ajaybir Randhawa | AjaybirRandhawa

### Education -

## **Ryerson University - Computer Science**

2019 - Current

CGPA: 3.9/4.33, Dean's List in 2019

Relevant Courses: Data Structures and Algorithms, Linux/Unix, Software Engineering

# Experience –

#### **IT Assistant - AR Renovation Supplies**

2016 - Present

- Developing risk quantification and management models based on client requirements and increasing productivity by 50%
- Modelling and forecasting parts and material demands from all key consumers
- Increasing product tracking efficiency by 150% through systematic and automatic product logs

## **Hackathon - Hack The North (Volunteer)**

January, 2021

- Helped organizers manage and judge 3,000+ competitors across 96 countries in the largest hackathon across Canada
- Tracking progress of teams through the judging process via Excel and troubleshooting audio/visual issues with participants

# Hackathon - IEEE Ryerson (1st Place)

Fall, 2020

- Led a team of three and developed solutions to multiple challenges in object-oriented programming and design in python and java
- Collaborated efficiently between team members to tackle solutions using software development life cycle (SDLC) methodologies
- Optimized solutions via divide and conquer, thread parallelism and other algorithms by 60%

# Skills -

**Languages:** Python • HTML • CSS3 • Javascript • Bash Scripting • Java • C/C++ • Punjabi

**Databases:** MongoDB • MySQL • PostgreSQL • SQL • Excel

**Frameworks:** Django · React · Agile · Waterfall

**Technologies:** PowerBI • Git • Jupyter • Kali Linux • Docker • Terminal Shell • Bootstrap

Other: Communication • Critical Thinking • Self-Motivated • Multitask

# Projects -

#### FlappyBird AI - Python • NEAT

**Github Repo** 

- Reconstructed Flappy Bird in Python using Pygame and Neat's unsupervised neural networks to further enhance my knowledge with machine learning
- Conducted unit-testing and optimization to debug and increase efficiency of the AI by 40%

#### **Covid-19 Data Visualization** - Python • Tensorflow • Keras

Github Repo

- Filtered and cleaned datasets to model US covid-19 cases and performed quantitative analysis on possible numbers with advanced analytical methods
- Trained AI model with provided data using tensorflow and sklearn via Linear regression and SVM models, results had 75% accuracy with actual number of cases

### MovieCrunchers - Javascript • HTML • CSS • Perl • NoSQL

**Github Repo** 

- Analyzed requirements and designed, developed and launched movie review website and platform for user interaction with RESTful APIs integration
- Implemented LAMP stack to construct a website in a group of four for a movie website built to handle 30,000 requests per month, along with handling the database and SQL queries