

# Pahulpreet Panesar

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## EXPERIENCE

### CIBC

#### APPLICATION DEVELOPER CO-OP

Jan 2017 – Aug 2017 | Toronto, ON

- Worked on the Skunkworks Innovation team to develop an application that teaches financial literacy to children. Primarily written using MEAN stack (MongoDB, ExpressJS, Angular 4, NodeJS) integrated with Ionic 2 to launch as a mobile application.
- Increased sprint velocity by 16% during my time there.
- Used Agile/Scrum methodology including 2 week sprints and daily standup meetings. All code was reviewed, perfected, and pushed to production.
- Developed a Resume Screener application to be used internally that greatly helped the team in the hiring process
- Exposed to different applications to ameliorate developer experience, such as BitBucket, Postman, JIRA, RoboMongo etc.

## EDUCATION

### UNIVERSITY OF BRITISH COLUMBIA

#### BACHELOR OF SCIENCE, COMPUTER SCIENCE

Expected May 2020 | Vancouver, BC

#### COURSEWORK:

Basic Algorithms and Data Structures

Introduction to Computer Systems

Software Construction

Models of Computation

Computations, Programs, and Programming

GPA: 3.60 Overall

## SKILLS

### PROGRAMMING

#### Languages:

Java • Python • JavaScript • HTML • CSS • TypeScript •  
NodeJS • C# • C/C++

#### Frameworks:

AngularJS • Ionic • Flask • JQuery • Bootstrap

#### Tools:

Adobe Creative Suite • Unity3D • Blender • MongoDB •  
MySQL • OpenCV • NumPy • TensorFlow • PyGame • Keras  
• RoboMongo • Postman • Bash • Jira • Git

## PROJECTS

### ENDLESS AI

Python, OpenCV, TensorFlow, Keras, PyGame, NumPy

- Developed a python game in a team of 5 which adapts difficulty to the players skill level based on their emotion in realtime
- Uses OpenCV and webcam for facial recognition, and a custom Machine Learning Model trained on a Kaggle Emotion Dataset using Tensorflow and Keras.
- Personally responsible for implementing the webcam recognition functionality and connecting the inputs in realtime to the Machine Learning Model, using NumPy heavily. Also took a heavy part in developing the game using PyGame and the development of the Machine Learning Model.
- Voted best project by 22 other teams at the Global AI Hackathon - Toronto and was also invited to demo at NextAI Canada.

### SHARKMARINE

C#, Unity3D, Blender

- Built a Virtual Reality Android App using Unity3D that immerses the user in an underwater world where they're surrounded by sharks and trying to survive inside a submarine.
- Uses the Google VR SDK for compatibility with Google Cardboard.
- Designed various game assets and animations for the game with Blender
- Developed scripts with C# and Visual Studio

### WIKIPAHULIA

Python, Flask, Bootstrap

- Created a Python wiki that utilizes REST APIs and Flask for CRUD features
- Spiced up front end design using Bootstrap

### MIND THE GAP

Java, JUnit, Android Studio

- Implemented an Android application that presents London's public transit information to the user.
- Wrote JSON parsers to perform ETL of train data, including lines, stations, and arrival times from the TfL API.
- Drew routes and stations using OpenStreetMaps and displayed train arrivals at each station.
- Developed with Java in IntelliJ and perform automated testing using JUnit.