

# Dilpreet S. Chana

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## EDUCATION

### UNIVERSITY OF WINDSOR | HONOURS COMPUTER SCIENCE WITH CO-OP AND MINOR IN MATHEMATICS

Sept. 2016 - Present | Expected 2020 | Windsor ON.

Major Average: 96.66

## EXPERIENCE

### OPTIMOTIVE TECHNOLOGIES | CHIEF TECHNOLOGY OFFICER

August 2016 - Present | Windsor ON

Optimotive Technologies is a tech startup building innovative automotive applications. Optimotive is focused on developing **vision technology** for the interior of a car.

- Created camera technology for vehicle interiors that allow the car to know what is happening within the cabin.
- Manage a development team of 4.
- Winner of the EPICenter accelerator best tech startup award out of 12 startups.

### FIRST ROBOTICS | LEAD SOFTWARE ENGINEERING & MENTOR

Sept. 2013 – June 2016 | Honourable Vincent Massey S.S.

- Created an **OpenCV** program to track and lock onto a target in real-time with an accuracy of 95%.
- Taught a new team of 10 developers how to program with **C++**, Java and **OpenCV**.
- Won the Windsor regional competition out of 50 teams and competed at the international level.

## TECHNICAL SKILLS & INTERESTS

**PROGRAMMING LANGUAGES** C++ • Python • C# • C • Java • Objective-C • Bash • Swift

## PROJECTS

### PREFERENCE | [HTTPS://GITHUB.COM/OPTIMOTIVE/PREFERENCE](https://github.com/Optimotive/Preference)

The preference system recognizes the user's face and outputs all preferences (seats, radio, etc.) in the car.

- Designed the Preference system in **C++** using **OpenCV** libraries.
- Implemented custom facial recognition algorithms with 80% accurate recognition.
- Utilized **Tensor Flow** frameworks to implement a neural network for self learning.
- Engineered **custom PCBs** and electrical systems to bypass the car's central computer.

### ARTEMIS GAME ENGINE | [HTTPS://GITHUB.COM/ARTEMISENGINE/ARTEMIS-ENGINE](https://github.com/ArtemisEngine/Artemis-Engine)

Artemis is a modern cross-platform 2D game engine.

- Developed Artemis Engine in C# using Monogame/XNA libraries.
- Implemented unique flow control objects allowing users to create a multi-page application with great efficiency.
- Designed to allow users to focus on developing game ideas rather than code.
- Developed a simplified method of game animation and graphical augmentation.

## HONOURS & AWARDS

2015	Top 25%	Hypatia Math Contest
2015	Winner	FIRST Robotics Regional Competition
2015	Finalist	FIRST Robotics Worlds Competition
2015	Top 25%	Canadian Computing Competition
2016	Honours	High School Graduation
2016	Ontario Scholar	High School Graduation