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

PROJECTS

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
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.

OPTIMOTIVE TECHNOLOGIES | Founder
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 | Volunteer & 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.

HARRY POTTER: NEW HORIZONS | https://github.com/DSchana/Final-Project-11
Grade 11 Final Project

- Created a partial remake of Harry Potter for the Gamboy colour in python.
- Implemented a simple turn based battle system
- Included randomly generated enemies throughout the maps.
- Used object-oriented design to optimize and organize program flow.

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