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

COMPUTER SCIENCE Computer Vision • Artificial Intelligence • Robotics • Graph Theory
Dynamic Programming • Microprocessors • Algorithmic Problem Solving • Optimization

MATHEMATICS Matrix Theory • Projective Geometry • Control Theory • Chaos Theory • Game Theory

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.
- 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.

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