Dilpreet S. Chana

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EDUCATION

UNIVERSITY OF WINDSOR | Honours Computer Science with Software Engineering and Co-op
Sept. 2016 - Present | Expected 2020 | Windsor ON.

EXPERIENCE

FIRST ROBOTICS | Software Engineering Leader & Mentor
Sept. 2013 – June 2016 | Honourable Vincent Massey S.S.

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

CANADA SOUTH SCIENCE CENTRE | Technical Support / Customer Relations
July 2012 - July 2015 | Windsor ON

- Developed an iOS app to allow users quick access to maps and information of the facility, along with the option to book tours and parties.
- Greeted and directed visitors, answered phone calls using excellent communication skills.
- Assisted and lead in technical areas for regular maintenance of the centre.

TECHNICAL SKILLS & INTERESTS

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

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

MATHEMATICS Matrix Theory • Projective Geometry • Control Theory • Game Theory • Discrete Math

PROJECTS

ARTEMIS GAME ENGINE | https://github.com/ArtemisEngine/Artemis-Engine

- Artemis is a modern cross-platform 2D game engine designed on top of Monogame/Xna.
- The engine implemented unique flow control objects that allowed users to create a multi-page application with great efficiency.

FRC STRONGHOLD TARGET FINDER | https://github.com/DSchana/FRC-Target-Finder

- Find and track the target in a high speed game of FIRST Robotics.
- Used real-time image processing to isolate a target pattern in a scene.
- Optimized the algorithm to operate at around 50 frames per second.

HONOURS & AWARDS

2013	Top 25%	Fryer Math Contest
2014	Top 25%	Galois Math Contest
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