

# Dilpreet S. Chana

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## EDUCATION

**UNIVERSITY OF WINDSOR**  
**HONOURS COMPUTER SCIENCE**  
Expected 2020 | Windsor, ON

## LINKS

Github:// **DSchana**  
LinkedIn:// **dschana**  
Twitter:// **@dschana2**

## SKILLS

### PROGRAMMING LANGUAGES

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

## INTERESTS

### COMPUTER SCIENCE

Artificial Intelligence • Computer Vision •  
Graph Theory • Robotics •  
Microprocessors • Algorithmic Problem  
Solving • Optimization

### MATHEMATICS

Linear Algebra • Matrix Theory •  
Differential Calculus • Discrete  
Mathematics • Control Theory • Game  
Theory • Euclidean Geometry •  
Projective Geometry

## COMPETITIONS

### PROGRAMMING

2015-2016 CCC  
2015-2016 ECOO

### MATHEMATICS

2010-2011 Gauss  
2012 Pascal  
2013 Fryer  
2013 Cayley  
2014 Galois  
2014 Fermat  
2015 Hypatia  
2015-2016 Euclid  
2015-2016 CSIMC

## EXPERIENCE

### FIRST ROBOTICS | SOFTWARE ENGINEERING DIVISION 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 generation of developers how to program with C++, Java and OpenCV.
- Won the Windsor regional competition and competed at the international level.

### WEST OF WINDSOR INC. | ADMIN ASSISTANT

Summer 2014 | Windsor, ON

- Developed an iOS app to allow users quick access to the company resources.
- Assisted in office activities.

### 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.

## PROJECTS

### HARRY POTTER: NEW HORIZONS |

[HTTPS://GITHUB.COM/DSCHANA/FINAL-PROJECT-11](https://github.com/dschana/final-project-11)

Grade 11 Final Project

- Top down partial remake of Harry Potter Chamber of Secrets for Gameboy Colour in python 3.
- Used object-oriented design to optimize and organize program flow.

### ARTEMIS GAME ENGINE |

[HTTPS://GITHUB.COM/ARTEMISENGINE/ARTEMIS-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](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.

## HONOURS & AWARDS

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