

# RAHUL AGARWALA

+1(519)500-2962

agar3180@mylaurier.ca

Waterloo, Ontario

## Education

**Wilfrid Laurier University | May 2021**

Honours Bachelor of Science

Computer Science and Mathematics

Major GPA: 11.14 / 12.0

## Links

**Website:** <https://rahul515.github.io>

**Linkedin:** [www.linkedin.com/in/ra-rahul](https://www.linkedin.com/in/ra-rahul)

**GitHub:** <https://github.com/Rahul515>

## Skills

### Languages:

Python, C, Java, JavaScript,  
Assembly, Pygame, C++, HTML,  
CSS, XML

### Tools & Frameworks:

Android Studio, Adobe Photoshop  
VBA in Excel, Heroku, Git

### Database:

SQL, HeidiSQL, MongoDB

## Awards

### Faculty of Science Dean's Honor Roll

Qualified for the Honor Roll for  
scholastic achievements in for 2018/19  
academic year.

### Scholarship (Wilfrid Laurier)

Recipient of Merit Scholarship

### Exe.BIT Robo-Tricks

1<sup>st</sup> Place

### International Informatics Olympiad

Rank: 75

### Zenith Karate-Do Tournament

1<sup>st</sup> Place in Katha and Kumete

### Keventers Cup Soccer Tournament

1<sup>st</sup> Runner up

## Relevant Coursework

Algorithm Design and Analysis (CP312)

Data Structure II (CP264)

System Programming (CP367)

Software Engineering (CP317)

Digital Electronics (CP220)

Object-Oriented Programming (CP213)

Microprocessor I (CP216)

Database I (CP363)

Multivariable Calculus (MA201)

Probability and Statistics (ST 230)

## Work Experience

### Instructional Assistant | Wilfrid Laurier University | 2018 - Present

#### CP104: Intro to Programming:

- Taught the basic components of programming to a lab of 45 students

#### CP164: Data Structures I:

- Helped students grasp a better understanding of the different data structures in Computer Science.
- Assisted them analyse and debug their codes for the lab problems

### Peer Tutor | Wilfrid Laurier University | 2019 - Present

- Held regular office hours to help students in need of one-on-one tutoring for any Mathematics or Computer Science courses.

### Math Mentoring Program | Wilfrid Laurier University | 2020 - Present

- Conducted study sessions for first year math courses.
- Each session aimed to incorporate effective learning strategies while reviewing and reinforcing course content.

## Projects

### Pygame Project | 2016

- Recreated the classic Snake game with some modifications.
- Scripted the game on Python using its Integrated Development Environment and combined it with the Python module Pygame to implement the graphics.

### Fibonacci Sequence Identifier | 2018

- Used a switch to give the device a 3 bit binary input and displayed the resulting output using a 7-segment display.
- Used Quartus II as the software to program the CPLD with the help of logic gates and displayed the resulting output on the 7-segment display.

### Omnifood (website) | 2019

- Created a website for an online course using resources provided by the professor.
- Used HTML5, CSS3 and JavaScript to build the website with brackets as the editor.

### Cabo: Card Game (Android App) | 2019

- Developed an Android strategic card Game that helps improve memory.
- Implemented an AI bot that chooses one of hundreds of moves to play after observing the strategy of other players.
- Developed the application on Android Studio where the front-end layout was created using xml and java for the animations.
- Used java for the back-end to implement the other classes.

## Volunteer Activities

### Head of Robotics Committee | LSA | 2016 - 2017

- Selected out of a pool of 520 students to lead the school robotics team.
- Taught the basics of robotics to students of different schools in various workshops and Interschool Robotics competitions as a mentor.

### Core Committee Member | Exe.BIT | 2016

- Helped organise our annual Interschool IT Fest.
- Developed and maintained the website for the fest.
- Co-supervised the event Code-Chef: Test your coding skills.