

# RAHUL AGARWALA

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## Education

**Wilfrid Laurier University | Dec 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>  
**Slatelearn:** <https://www.slatelearn.in/>

## Skills

### Languages:

Python, Dart, C, Java, JavaScript,  
Assembly, Pygame, C++, HTML5,  
CSS3, XML

### Tools & Frameworks:

Flutter, React, React Native, Flask  
Android Studio, Adobe Photoshop,  
Git

### Database:

MongoDB, SQL, HeidiSQL

## 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 Robotics Competition

1<sup>st</sup> Place

## Relevant Coursework

Cryptography (CP460)  
Algorithm Design and Analysis (CP312)  
Data Structure II (CP264)  
System Programming (CP367)  
Software Engineering (CP317)  
Digital Electronics (CP220)  
Microprocessor I (CP216)  
Database I (CP363)  
Multivariable Calculus (MA201)  
Probability and Statistics (ST 230)

## Projects

### Slate Learn | 2020

- Created an E-commerce website for android devices along with a pdf editor to purchase and read school books.
- Used MongoDB to store and manage the database for schools, students and books and AWS to deploy the app.
- Used flask for the backend to retrieve information from the database and link it to the frontend where we used react-native.

### 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.

### 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.

## Work Experience

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

- CP104: Intro to Programming:**  
Taught the basic components of programming.
- CP164: Data Structures I:**  
Helped students grasp an understanding of the different data structures in Computer Science and assisted them analyse and debug their codes.
- CP264: Data Structures II:**  
Taught students the concepts of higher level data structures in a lower-level language C.

### Research Assistant | Wilfrid Laurier University | 2020 - Present

- Conducted a literature review, and data analysis for experiment simulations thermodynamics.
- Investigated tools based on new education technologies that would allow building physics-based animations/simulations using HTML5, CSS3 and JavaScript.

### 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.