

## Ben Mask

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Available for 4 months beginning September 2020

### EDUCATION

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#### Bachelor of Computer Science, Co-op Option

September 2018 - Present

Carleton University, Ottawa ON.

- 3<sup>rd</sup> Year Undergraduate, CGPA 11.8/12.00 (A+)
- Deans' Honour List (2018 - Present)
- Faculty Scholarship (2018 - Present)
- Expected Graduation: June 2023

### WORK EXPERIENCE

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#### Junior Software Developer Co-op

May 2020 - Present

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- Developed C++ code analysis tools written in Java to mangle and de-mangle C++ names for use within the development of Cloakware Software Protection tools
- Worked with Selenium and Python in the development and maintenance of piracy pcontrol tools
- Engaged in an Agile team environment, setting weekly sprint goals, participated in daily standups, and retrospectives

*Used: Java, C/C++, Junit, Python, Selenium, Git, IntelliJ, Jira, Confluence*

#### Custodian

May – August 2019

Ottawa Catholic School Board

- Managed summer school facilities to understand and meet the needs of program coordinators, resolve potential issues, and create a positive work atmosphere
- Safely performed daily tasks according to WHIMIS standards
- Successfully completed tasks requiring attention to detail on or ahead of schedule in an independent work environment

### APPLIED PROJECTS

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#### Restaurant Ordering Web Application

February 2020

- Developed and tested a node server and client-side JavaScript to build a web application that allows users to make orders from different restaurants and send them to the server to be processed
- Successfully developed skills working with Pug, JavaScript, and HTTP Requests/Responses

#### Android/iOS Messaging App

January 2020

- Developed mobile messaging apps natively for Android and iOS platforms which facilitated messaging through web sockets and a local NodeJS server

#### Vehicle/Cell Tower Simulator

November 2019

- Implemented a GUI client/server-based simulation of vehicles roaming throughout a city and communicating with towers using TCP and Stream Sockets in C

- Solved difficult challenges such as multi-threading by looking at simple sub-problems to be solved in this implementation and following the development life cycle for an application

**iOS Projectile Motion Simulator**

**March - April 2019**

- Developed an iOS application to simulate projectile motion in 2D space using touch-based events, object-oriented design, and the Quartz graphic system
- Produced test cases to compare with program output, resolve errors, and produce an accurate model

**RELEVANT SKILLS AND EXPERIENCES**

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- Experience programming in Java, C/C++, Swift, Python, JavaScript, HTML, CSS
- Experience working with collaborative tools such as Github, Jira, and Confluence
- Successfully worked in team environments following Agile methodology
- Developed Android and iOS applications natively using framework API's, XML, and MVC programming principles
- Implemented efficient search algorithms, simulations, recursive functions, and image processing in Python
- Produced clear and comprehensive documentation for various software projects including the use of Javadoc and UML
- Applied black box debugging techniques to test edge cases and identify bugs within software

**EXTRACURRICULAR EXPERIENCE**

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**Mentor**

**January 2020 - Present**

Science Student Success Centre

- Working alongside other mentors to plan and facilitate the Carleton Coding Challenge and give workshops relating to technologies such as Git
- Acting as a resource for other students looking to develop strong academic skills in the sciences

**Organizer**

**September 2019 - Present**

cuHacking

- Collaborated with other organizers to plan hackathon workshops, speakers, schedules and activities

**Director**

**October 2017 - April 2018**

St. Paul High School Robotics Team

- Planned and facilitated regular team project meetings regarding competition builds for the IEEE Arduino Challenge
- Developed and lead weekly lesson plans on electronics, hardware, and coding for members to learn and build STEM skills

**RECORD OF GRADES**

Ben Mask

Computer Science Honours – 2<sup>nd</sup> Year Undergraduate**Carleton University**

Cumulative Grade Point Average 11.8/12.0 (A)

Number of Academic (4 month) Terms Completed: 3

Graduation Date: June 2023

Course Number	Course Name	Letter Grade
<b>1000 Level:</b>		
COMP1405	Introduction to Computer Science I	A+
COMP1406	Introduction to Computer Science II	A+
COMP1601	Introduction to Mobile Application Development	A+
COMP1805	Discrete Structures I	A+
CLCV1003	Survey of Roman Civilization	A+
HIST1001	The Making of Europe	A+
MATH1007	Elementary Calculus I	A
MATH1104	Linear Algebra for Engineering or Science	A
PSYC1001	Introduction to Psychology I	A-
<b>2000 Level:</b>		
COMP2401	Introduction to Systems Programming	A+
COMP2402	Abstract Data Types and Algorithms	A+
COOP1000	Co-op Preparation	SAT
MATH2107	Linear Algebra II	A+
RELI2230	Global Christianity	A+
STAT2507	Introduction to Statistical Modeling I	A+
COMP2402	Introduction to Software Engineering	A+
COMP2406	Fundamentals of Web Applications	A+
COMP2601	Mobile Applications	A+
COMP2804	Discrete Structures II	A+
STAT2509	Introduction to Statistical Modeling II	A+