## DAVID KHAZZAM

#### Software Developer | 3rd Year Student

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#### **EXPERIENCE**

#### Kinaxis

#### **Algorithms Developer**

Sept. 2020 - Dec. 2020

• Future C++ backend developer on Supply Chain Management algorithms

#### **Web Application Developer**

Jan. 2020 - May 2020

- Currently a finalist for University of Waterloo Co-op Student of the Year
- Built 30+ reusable and responsive React components, leveraging Redux
- Practiced test-driven development to unit test components utilizing Jest,
  Jasmine and TestCafe, improving test coverage to over 97%
- Took initiative to establish help resources and tutorials for new employees
- Designed and implemented cutting-edge critical software for BETA launch of front-line customer product
- Routed data using 10+ RESTful API endpoints from C# server

## Agriculture and Agri-Food Canada Knowledge Graph Developer

April 2019 - Aug. 2019

- Created Python scripts and SPARQL queries to clean and organize over 20,000 botanical species' data into practical formats
- Created, implemented and stored knowledge graphs in a database on an AWS Metaphactory platform, facilitating user interactivity
- Built interactive visualizations using R and D3.js, enabling botanists to develop new insights and understandings of plant species
- Used Machine Learning and Data Mining to identify new correlations

## **PROJECTS**

#### C++ Compiler

University of Waterloo | Top Grade, over 500 students May-Aug. 2020

- Incorporated C++ and MIPS to create a complete end-to-end compiler
- Created an Assembler, a Scanner, a Context Sensitive Analyzer and a Code Generator for the C++ language
- Optimized compiler to be in the top 1% of the most efficient submissions

#### trEcho

#### uOttaHacks<sup>3</sup> | Top 20, over 400 participants

Feb. 2020

- Leveraged Google Map API and AWS Lambda for Amazon Echo
- Employed algorithm on a **Flask app** to cache package's location, **drastically reducing stress** of over 30 million daily requests on the delivery system

#### Bit by Bit

- Won 10,000\$ of support from the Algonquin College Centre for Innovation
- Collaborated to design an app to help recovering patients track their fitness
- Used HTML, CSS, React and Node.js, and a Fitbit API to fetch the data

#### **Optimo Vision Analyzer**

#### StarterHacks | 1st Place, over 500 participants

Jan. 2019

• Implemented voice recognition software using Web Speech API in addition to HTML, JavaScript, and CSS to allow a website to process and respond to a user's input, as well as dynamically adjust to varying screen-sizes

#### **SKILLS**

#### **Programming Languages**



#### **Tools and Technologies**

Git	Jest & Jasmine			Bash		
Unix/Linux		Windows		S	AWS	
MIPS HTM		ИL	CSS		Shiny	

#### **EDUCATION**

#### Candidate for Bachelor of Honours Computer Science

#### **University of Waterloo**

**2018 - 2022** 

- President's Scholarship of Distinction (97.3% entrance average)
- GPA: 3.82/4.0

### **RELEVANT COURSES**

- Object-Oriented Software Development
- Data Structures and Data Management
- Foundations of Sequential Programs
- Computer Organization and Design

### **LANGUAGES**

English French Spanish



# HOBBIES & EXTRACURRICULARS

- Varsity Quidditch Captain
- Acapella
- Strategy games aficionado
- Math Society Office Manager