DAVID KHAZZAM

Software Developer | 3rd Year Student

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EXPERIENCE

Google
Software Developer Intern   May 2021 - Aug 2021

- Designed, implemented, tested, documented, launched and landed a **Go** tool that enabled the analysis of a key internal tool's performance metrics when run over **hundreds of thousands** of migration runs, across the **entirety of Google's codebase**
- Made **immediate** impact on team's work, providing insight to influence **key** business decisions

Kinaxis
Algorithms Developer   Sep 2020 - Dec 2020

- Revamped a **C++** tool to detect and display **70+ supply-chain inefficiencies** in a user-friendly format, providing new avenues for resolving key problems
- Leveraged **NLP and Flask** to scrape social media, using interactive **Plotly** visualizations to display the effects of public sentiment on future demand

Web Application Developer   Jan 2020 - May 2020

- **Finalist for the University of Waterloo's 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%**

Agriculture and Agri-Food Canada
Knowledge Graph Developer   Apr 2019 - Aug 2019

- Created **Python scripts and SPARQL queries** to clean and organize **over 20,000 botanical species' data** into practical formats
- Used **Machine Learning and Data Mining** to identify new correlations

PROJECTS

Optimo Vision Analyzer
StarterHacks | 1st Place, over 500 participants   Jan 2019

- Implemented **voice recognition software using a 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 to **dynamically adjust to varying screen-sizes**

Bit by Bit
Hacking Health Ottawa | 1st Place, over 100 participants Jun 2019

- **Won 10,000$** of support from the **Algonquin College Centre for Innovation**
- Collaborated to design an app to **help recovering patients track their fitness**

C++ Compiler
University of Waterloo | Top Grade, over 500 students May - Aug 2020

- Created an **Assembler**, a **Scanner**, a **Context Sensitive Analyzer** and a **Code Generator** for the C++ language, passing **99.97%** of test cases
- Optimized compiler to be in the **top 1%** of the **most efficient** submissions

SKILLS

Programming Languages

C++   Go   Python   React & Redux   TypeScript   C   JavaScript   SPARQL   Scheme (Racket)

Tools and Technologies

Git   Jest & Jasmine   Bash   Unix/Linux   Windows   MIPS   HTML   CSS

EDUCATION

Candidate for Bachelor of Honours Computer Science
University of Waterloo   2018 – 2023

- President's Scholarship of Distinction (**97.3%** entrance average)
- **GPA: 3.9/4.0**

RELEVANT COURSES

- Operating Systems (W21)
- Algorithms (W21)
- Data Structures and Data Management (S20)
- Object-Oriented Software Development (F19)

LANGUAGES

English   ●●●●●
French   ●●●●●
Spanish   ●●●●○

HOBBIES & EXTRACURRICULARS

- 🏏 Varsity Quidditch Captain
- 🎵 Acapella
- ♟ Strategy games aficionado
- ✚ Math Society Office Manager