DAVID PEET

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EXPERIENCE

Compiler Software Engineering Intern — Huawei 🔗
📅 September - December 2020   ⚙ C++, LLVM, Bash

- Incoming Compiler Software Engineering Intern, will be researching and implementing **optimizations** in C++ for **LLVM compilers**

Software Developer Intern — McAfee 🔗
📅 January - April 2020   ⚙ C++, Bash, Win32API

- **Profiled and optimized** McAfee product installers pinpointing performance bottlenecks composing **70% of install time**
- Prevented **99% of unnecessary device reboots** from the McAfee installer affecting **500+ million users**
- Synchronized parallel execution of install engine instances via **IPC**
- Leveraged **CEF** to facilitate **message passing** between back-end and UI in response to user input and install progress
- Improved Angular UI **efficiency** and upgraded framework version

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Software Developer Intern — Axonify 🔗
📅 May - August 2019   ⚙ Java, Hibernate, JS, MySQL

- Led development of critical features released to **100 000+ users**
- Leveraged **dependency injection** improving REST API endpoints accommodating increasing server load
- Designed **testable**, **cross browser compatible**, and **maintainable** front-end components
- Unit tested server code using **Mockito & JUnit**

PROJECTS

Memory Sanitizer 🔗   ⚙ C++ · C · Make

- Implemented **software shim** intercepting calls new and delete allowing **tracking & reporting** of **memory usage and leaks**
- Fast & lightweight running **>100 times faster** than **Valgrind**
- Leveraged **DLL hijacking** forcing new and delete symbol resolution before stdlib linkage enabling **library call interception**
- Leveraged **Kernel persistent IPC** enabling external processes to message the shim modifying behavior
- Utilized **POSIX compliant** syscalls providing compatibility on Linux based Operating Systems
- Utilized **static linking** separating DLL and client **heap space** preventing the sanitizer from recording it's own memory consumption

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Git Branch Visualizer 🔗   ⚙ Java

- Created CLI **tracking** the **parent-child-orphan relationships** of git branches
- Leveraged **multiple processes** to **obtain state information** regarding the working local git repository

LANGUAGES

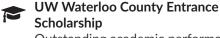C++   C   Java   JavaScript   Bash   TypeScript   SQL

TECHNOLOGIES

Git   Linux   Make   Win32API   Angular   Docker   Hibernate   Spring   Node.js   Grunt

EDUCATION

Bachelor of Computer Science, University of Waterloo

3rd Year / Junior Year

📅 Sept 2018 - June 2023

GPA - 3.79/4.0

ACHIEVEMENTS

🎓 **Term Dean's Honours List**

🎓 **UW Waterloo County Entrance Scholarship**
Outstanding academic performance

🎓 **UW Presidents Scholarship of Distinction**
Over 95% entrance average

🏆 **OFSAA Bronze Medal**
3rd / 10 000+ athletes in Discus Throw at OFSAA

🏆 **Mike Moser Memorial Award**
Excellence in academics and athletics (1000+ students)

🏆 **Ontario Basketball Cup Gold Medalist**
Provincial Champions with regional travel team (100+ teams)

INTERESTS

- Operating System & Compiler Design
- Computer Security
- Distributed Systems
- Strategy Board Games
- Basketball, Volleyball, Track & Field