DAVID PEET

& davidpeet.me

in dapeet

davidpeet8

EXPERIENCE

Compiler Software Engineering Intern

Huawei %

Sept - Dec 2020

C++, LLVM, OpenCL

- Standardized object file format by converting proprietary format to ELF improving power efficiency of global data access by 66%
- Implemented option passing system using metadata allowing compiler backend to easily replicate state of failing remote compilations locally
- Identified & resolved compiler correctness issues including incorrect function attribute propagation
- Proposed build system improvements reducing build time by >50%

Software Developer Intern

McAfee %



Jan - Apr 2020

C++, Bash, WinAPI

- 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
- Leveraged Chromium Embedded Framework to facilitate message passing between install engine and UI

Software Developer Intern

Axonify %

May - Aug 2019

🐾 Java, JavaScript, MySQL

- Led development of front end modules released to 100 000+ users
- Implemented 15+ testable and maintainable front-end components
- Improved back-end service code coverage using Mockito & JUnit

PROJECTS

Note Modules %

C++

- Pre-processes Markdown preventing data duplication & combating anti-patterns in the Markdown language specification
- Locally hosts **RESTful endpoints using Flask** for file-system queries eliminating network latency
- Enhances note taking experience with blazing fast deep searching, pre-processing extending Markdown language & Latex rendering

Memory Sanitizer %

© C++ · C · Make

- Facilitates lightweight memory leak checking with minimal performance overhead (>10 000% faster than Valgrind)
- Leverages Software Shim design enabling use on production builds without recompiling
- Provides insight into compiler optimizations by displaying true size of allocations including compiler induced padding
- Conforms to the POSIX system call interface for cross platform compatibility
- Avoids tracking own memory consumption by utilizing static linking to separate library and client heap space

SKILLS



EDUCATION

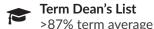
University of Waterloo **Bachelor of Computer Science** Junior / 3rd Year

Sept 2018 - Present

GPA - 3.83/4.0 | 87.15%

Data Structures: 96%

ACHIEVEMENTS



Track & Field Provincial Bronze 3rd / 10 000+ athletes @ OFSAA

Mike Moser Award Recipient Graduating athlete top student (1000+ students)

Waterloo County Scholarship Outstanding academic performance (10 000+ students)

Presidents Scholarship of Distinction 97% entrance average

> Athlete of the Year MVP in 3 sports (1000+ students)

Ontario Basketball Gold Medalist OBA Cup (100+ teams)

INTERESTS

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