

# DAVID PEET

🌐 davidpeet.me

✉ dapeet@uwaterloo.ca

in dapeet

🔗 davidpeet8

## EXPERIENCE

### Compiler Software Engineering Intern

Huawei 🔗

Sept - Dec 2020

⚙ C++, LLVM, OpenCL

- Increased **power efficiency** of global data access by **66%** by converting proprietary object file format to ELF
- Reduced **compiler build time** by **10+ minutes** by migrating to new linker and build system
- Vastly **reduced debugging time of remote compilations** by implementing metadata option passing enabling config replication for **local debugging**
- Identified & **resolved compiler correctness issues** including incorrect **function attribute propagation**

### Software Developer Intern

McAfee 🔗

Jan - Apr 2020

⚙ C++, Bash, WinAPI

- **Pinpointed performance bottlenecks** composing **70% of install time** by profiling product installers which led to designing an approach to reduce install time
- Eliminated **99% of unnecessary device reboots** from the Windows System Security installer affecting **500+ million users**
- Reduced technical debt by **updating Angular framework version** for installer UI

### Software Developer Intern

Axonify 🔗

May - Aug 2019

⚙ Java, JavaScript, MySQL

- Developed **15+ testable & maintainable** front end components released to over **100 000+ users**
- Increased back-end service **code coverage** using Mockito & JUnit

## PROJECTS

### Note Modules 🔗

⚙ Python · Angular · C++

- Achieves **minimal network latency** by locally hosting **RESTful endpoints** using **Flask** for file-system queries
- **Combats anti-patterns** in Markdown specification & **prevents data duplication** by pre-processing source markdown
- Addresses traditional note taking issues including **searching & avoiding data duplication** by supporting blazing fast deep searching and note pre-processing

### Memory Sanitizer 🔗

⚙ C++ · C · Make

- Achieves **>100% faster startup** time and **>2 000% less runtime overhead** than Valgrind leading to lightweight **memory leak checking**
- Operates on **existing production builds** without recompilation by using a **software shim** design, intercepting system calls
- Achieves **cross platform compatibility** by conforming to the POSIX system call interface

## SKILLS

C++ C Python JavaScript

Bash Java SQL Rust

Git Linux Make LLVM

OpenCL Angular Docker

## 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

🎓 **Term Dean's List**  
>87% term average

🏆 **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