dedins.ky/...
/website
/github
/linkedin
/email

Thomas Dedinsky

Computer Engineering, University of Waterloo

Languages

- C/C++
- JavaScript
- Python
- Java
- SQL
- MATLAB

Coursework

- Embedded Software
- Operating Systems
- Systems Concurrency
- Algorithms and Data Structures
- Network Flow Theory

IDEs/Tools

- git/svn/perforce
- Atlassian Tools
- Unix Terminal
- vim/Bash Scripts
- IntelliJ-like IDEs
- Visual Studio
- Keil uVision

Education

- Computer Engineering
- University of Waterloo (UW)
- 2016 – 2021
- Combinatorics & Optimization (CO) Minor
- 3B Exchange in France (UTC)

Hobbies

- Euchre
- Community Moderation
- Video Games
- Leadership Conferences
- Academic Advocacy

Work Experience

Embedded Display Software Engineer – C/C++/Python
Jan 2020 - Apr 2020

Qualcomm Canada

- Developed for and validated the Snapdragon ASIC's software quad-pipe implementation as part of the Linux Kernel team for Android devices to allow for higher resolution displays
- Worked with and published code to both proprietary and open source Linux Kernel repositories
- Created an automated user/kernelspace testing script and a DTSI grammar implementation

Firmware Design Engineer – C++/MATLAB
Jan 2019 - Apr 2019

Infinera Corporation

- Optimized the firmware simulation code by changing variable ownership between languages through the use of MEX functions, using preprocessor metaprogramming for code generation to standardize inconsistent variable conversion methods, and reducing read-modify-write calls
- Created an automated testing suite which ran simulations on remote servers via repo commit

Intern Software Engineer – Java/React.js/SQL
Apr 2018 - Aug 2018

Veeva Systems

- Helped develop a life sciences software solution focused on large-scale management by working full stack in several production groups and individual efforts on an agile lifecycle
- Headed the creation of an automated API documentation tool and production of our new machine learning model, as well as the entire backend of our profile layout management feature

Mobile Developer – Ember.js/Cordova
Sept 2017 - Dec 2017

Department of National Defence

- Released a mental health-focus app, molding activities and utilities engineered to aid awareness and management of your mental health by implementing research in a practical application
- Improved an offline resource and utility app designed for Canadian troops in Latvia by creating a content manager system to allow code-illiterate personnel to repurpose the application

Software Developer – Java/ActionScript/SQL
Jan 2017 - Apr 2017

Bayer Pharmaceutical and Radiology

- Developed the multi-modality feature, uprooting the application to improve the previously hack-jobbed framework with sustainable code; worked full-stack in a scrum/agile environment

Projects

CEC Programming Competition Lead - Node.js
Mar 2018 - Mar 2019

- Coded and ran the Canadian Engineering Competition 2019 programming competition
- Focused on making the challenge language-agnostic by creating an API server for competitors to interact with, as well an interactive visual for judges and beta testers to easily comprehend
- Crafted an engineering problem for competitors rather than just a programming problem

Orientation Week Website - JS/PHP/SQL
Feb 2017 - Sept 2018

- Designed, implemented, maintained website in a pseudo-scrum way using industry practices
- Created a responsive front-end web design for various size screens on both desktop and mobile
- Made a dynamic user-based system with various roles using smart database management

Dielectric Field Simulation - Python
Apr 2019 - Aug 2019

- Created a working model of dielectric fields using inputted graphs and calculated intermediate values by converting the field into a series of linear equations and using numerical methods
- Worked under a tenured engineering professor during an undergraduate research assistantship and researched several research papers and electrostatics textbooks based on assigned tasks