

<http://dedins.ky/...>

-  /website
-  /github
-  /linkedin
-  /email
-  /volunteer
-  /articles

# Thomas Dedinsky

*With my background in Computer Engineering and leadership activities, I approach any given task with a practical toolset of knowledge, critical thinking, and persistence which allows me to thrive in its completion.*

## Languages

- C/C++
- JavaScript
- Python
- Java
- SQL
- Verilog
- Bash

## Coursework

- Embedded Software
- Operating Systems
- Distributed Systems
- Scheduling Algorithms
- Network Flow Theory

## Education

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

## Hobbies

- Euchre
- Community Moderation
- Leadership Conferences
- Tinkering
- Video Games & Livestreaming
- Academic Advocacy
- Online Learning

## 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 30% by changing variable ownership between C++ and MATLAB by using preprocessor metaprogramming for code generation to standardize inconsistent variable conversion methods and reducing redundant data transfer in library 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
- Implemented mental health research in relaxation activities for app released on Android/iOS
  - Created a content manager system to allow code-illiterate personnel to repurpose the app
- Software Developer – Java/ActionScript/SQL** Jan 2017 - Apr 2017  
Bayer Pharmaceutical and Radiology
- Worked full-stack in a scrum/agile environment and reworked major application infrastructure

## 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 as 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