

Employment

IT & Web Assistant	Faculty of Medicine - UBC	May 2019 - September 2019
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- Redesigned the CPS department's website using HTML and CSS to make it more responsive: cps.med.ubc.ca
- Developed and applied Batch and Python scripts to track Windows and Mac lab computers' usage rates.
- Provided IT support to over 30 faculty members (staff, professors, researchers) via email, in person or Spice-works Help Desk's ticketing system. Problems range from hardware setup to SQL database troubleshooting.
- Reduced Windows PC's downtime by automating the update process with PowerShell scripts interacting with the Windows Server Update Services (WSUS) API.

IT Intern	Elirons Consulting Inc.	January 2018 – July 2018
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- Collaborated with graphic designer to rebuild the company's website in a tight deadline: www.elirons.ca
- Built custom Zoho CRM modules and pipelines with Zoho's Deluge scripting language to help automate the sales department's workflow and reduced lead response time by 10%.
- Maintained the company's network and set up new employees' workstations via Windows Active Directory.

Education

Vancouver, Canada	University of British Columbia	Graduated May 2020
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- Bachelor of Science, Major in Computer Science
- Relevant Coursework: Advanced Operating Systems; Advanced Relational Databases; Distributed Systems; Applied Machine Learning; Computer Networking; Intermediate Algorithm Design; Software Engineering

Projects

Xeros Kernel (C, x86 Assembly)

- Monolithic kernel based on the Intel x86 architecture (IA-32/i386); capstone project for advanced OS class.
- A memory manager and process manager to manage memory allocated by user processes and handle IPC.
- A signalling system for the kernel to asynchronously signal user processes and signal handlers in user space.
- Device drivers for keyboard and two virtual devices that allow user interactions with a basic shell.

Al Dente (JS, React, MongoDB)	alдите.herokuapp.com
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- RESTful web app built on the Meteor framework that tracks and handles reservations for restaurants.
- Supports data visualization for peak reservation times for restaurant owners through the Recharts library.
- Allows social logins with Facebook and Google, or regular account creations for users to make reservations or owners to upload/manage their restaurants.

Coordinator Elector (C)

- Dynamically elects a coordinator among a group of distributed nodes using the Bully algorithm and UDP.
- Supports coordinator failure detection and include vector clocks for all nodes for election events ordering.
- Prevent deadlocks due to network partition with periodic broadcast messages from coordinator node.

Musictag (Go)	danielgong.com/project/mp3meta
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- A CLI tool to decode random names for media items stored on Apple devices (iTunes library); O(n) run time.
- Parses the ID3 tag from the MP3 files and renames the file in place appropriately based on the tag metadata.

Skills

- **Languages:** C, C++, Go, Java, JavaScript, Python, SQL, Bash, x86 Assembly
- **Web:** Express, Meteor, Node.js, React, Redux, MongoDB
- **ML/System:** Git, Docker, Linux, Numpy, Pandas, Scikit-learn