

Education **Honours Bachelor of Science, Computer Science** Sept. 2010 - Apr. 2015
Lakehead University

Work Experience **Giatec Scientific Inc.** Jan 2022 - Present
Lead Software Developer Feb 2020 - Jan 2022
Manager of Software Development Jan 2019 - Feb 2020
Senior Web Developer

- Improved IoT device security with signed boot and custom initramfs to use LUKS2 encrypted filesystem
- Implemented updates via multiple boot partitions
- Developed third party integrations for SmartMix <https://www.giatecscientific.com/products/software-development>
- Managed SmartRock Mobile App (Android and iOS) and Giatec 360 software teams
- Infrastructure
 - Kubernetes, helm, Docker
 - Microsoft Azure Cloud
 - GitLab CI, GitHub CI
- Backend
 - Python, NodeJS
 - Django, Express, Flask
 - REST, GraphQL
 - PostgreSQL
 - [Drizzle ORM](#), Sequelize
 - Axios
 - Testing: Pytest
- Frontend (Giatec 360, SmartMix)
 - TypeScript
 - Angular, React
 - Testing: [Cypress](#)

Perspexis Technologies Inc. July 2015 - Dec 2018
Programmer (Employee #2)

- Implemented RPC API with custom TCP protocol
- Implemented Desktop GUI Application with Qt and QML
- Managed hosting and backup solution for virtual machines, leveraging qcow2 and ZFS
- Backend
 - Python
 - Flask, XMLRPC, REST
 - Linux, Postgres, Beanstalkd, Redis
 - Testing: Python unittest, Pytest
 - GUI Testing: Ranorex

- Jenkins
- Frontend
 - Python
 - PyQt5, Qt QML
 - Webix JavaScript Framework

Golden Spear
Backend Developer (Contract)

June 2015

- Created internal web application to plan and assemble training material
- Backend implemented in Django
- Frontend built with Bootstrap
- PostgreSQL Database
- Node.js application for online store
 - PhantomJS
 - Testing: Mocha
 - Worked with Captain Crunch (John Draper)

[Wind River Systems](#)
Full Stack Developer

Jan. 2013 - May 2015

- Developed a webscraper to index online products using PhantomJS
- Implemented an API to fetch product information using Sails.js
- Created Internal and Customer Facing Websites
 - Python, Django, Flask
 - JavaScript, NodeJS, AngularJS
 - Testing: Pytest
 - GUI Testing: Eggplant
- Administered Linux Servers
 - SSH, Email, LDAP
 - Databases (MySQL, SQLite, PostgreSQL, MongoDB)

Technical Skills

Languages:

- Python, JavaScript, Bash

Technologies:

- [PostgreSQL](#)
- [NodeJS](#)
- [Django, Flask](#)
- [git, Mercurial](#)
- Linux
- Kubernetes, Docker
- [Angular](#)
- [Ranorex GUI Testing](#)
- [Eggplant GUI Testing](#)

Open Source	heatpump-cost - Compare costs of a heat pump to other heating sources.
	nginx-auth-proxy - Authentication for multiple services using nginx.
	qml-explorer - A Debug Console for Qt QML.
	loud-clips - Create a highlight reel of the loud parts of a video.
	htmd - Write Markdown and Jinja2 templates to create a website.
	hashword - Password Manager.
Meetups and Conferences	<ul style="list-style-type: none">• Regular member of Ottawa Python Meetup• PyCon US• PGCon in Ottawa, ON, Canada• Startup Weekend Thunder Bay