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## Experience

- 2022-Current **Senior Software Engineer, Bench Accounting, Remote**
- Designed and developed business critical services on AWS infrastructure, using TypeScript, CDK, Python and Docker
  - Automated business processes leveraging LLMs, greatly reducing operational costs and manual effort
  - Greatly reduced serverless costs and improved performance of application stacks deployed on AWS
  - Made impactful improvements to developer experience by standardizing setup and deployment of individual development environments using Ansible and TypeScript
  - Spearheaded effort to discover and remediate security vulnerabilities organization wide
  - Contributed improvements to internal build tooling, significantly reducing build times, increasing developer velocity across all teams
  - Contributed to transition of a polyglot service stack to modern cloud environment, greatly improving developer experience and reducing effort required to set up development environment
  - Transitioned CI/CD pipelines from Jenkins and CircleCI to GitHub Actions, reducing cost and greatly improving build times and reliability
  - Created analytical tooling in order to improve accuracy and recall of ML classification models
  - Mentored and provided guidance to developers across multiple teams, directly contributing to developer growth
- 2022-2022 **Team Lead & Senior Software Engineer, Block 64, Remote**
- Lead a R&D team of 5 developers
  - Spearheaded development process improvements, resulting in a measurable reduction of production bugs and increase of velocity
  - Made critical architectural decisions and developed a strategy for transition from legacy to modern platform without impact to business
  - Have seen projects through from design to development and into years of maintenance
  - Took charge in mentorship of developers, promoting professional growth and development of a T shaped skillset
  - Facilitated communications between development, support and sales teams, balancing long and short term business goals
- 2020-2022 **Senior Software Engineer, Block 64, Remote**
- Designed and developed a series of mission critical, high throughput user facing applications deployed on millions of machines worldwide using C, C# and C++
  - Laid groundwork to strangling and migrating a monolith legacy service to a scalable, containerized instance
  - Set up automated CI/CD pipelines using Octopus Deploy, Azure DevOps
  - Designed and developed ETL processes, substantially reducing data load times
  - Greatly reduced the amount of production issues by finding and fixing memory leaks, poorly optimized algorithms, security issues and problems related to interactions with third party firmware and software using dotTrace, Wireshark, OWASP ZAP and miscellaneous profiling tools
  - Took charge of planning and migrating away from legacy codebases, significantly reducing the amount of technical debt and increasing velocity
  - Interviewed, on-boarded and provided mentorship to software developers
- 2018-2020 **Software Engineer, Block 64, Toronto**
- Took charge of laying down groundwork for unit and integration testing frameworks
  - Promoted good development practices - introduced code reviews and Agile practices to the development team
  - Introduced the concept of Docker and containers to the team, laying groundwork for scalable software deployments
  - Designed and developed cross platform user facing applications using C# , Python, PHP, JQuery and MySQL
  - Designed and developed containerized services and APIs using Python backed by Redis and MySQL
  - Performed complex query optimization on large datasets, resulting in sharp improvements to runtime performance
  - Performed performance and memory optimization of production applications
- 2014-2018 **Software Engineer, Encycle, Toronto**
- Designed and developed a wide array of proprietary software, kernel drivers, OS and tooling for a next generation of an embedded system used for energy management.
  - Primary languages: C, C# , Java, Python, Bash
  - Led knowledge sharing workshops in order to promote team member cross-functionality

2013–2014 **Support Analyst / Developer**, *Encycle*, Toronto

- Diagnosed and resolved a wide array of software, firmware and hardware issues, primarily using SQL, Python, C# and Bash
- Created BI reports for the operations team, using SQL and Python

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## Education

2013 **Advanced Diploma in Computer Engineering with Honors**, *Humber College*, GPA 4.0

WHMIS Certified

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## Personal projects

### Software

- Website monitoring software used for tracking, parsing and sending out notifications on new posts using Python and SQLite
- System metrics collector, collecting temperature, RAM and CPU statistics using Python, Bash and InfluxDB
- Traffic monitor collecting, submitting and plotting data in real time using ER-X APIs, web sockets and InfluxDB
- Tool to bulk edit and delete social media posts written with NodeJs and TypeScript

### Hardware

- WIFI enabled, battery powered, energy efficient embedded device collecting and sending environmental data to Linux server using MQTT and InfluxDB, graphing data in Graphite and Grafana
- Battery powered, energy efficient embedded device collecting and sending environmental data to Android phone through Bluetooth, using Android application to display data graphs
- Portable, high power, battery powered induction heater

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## Personal interests

Software Development: I enjoy learning about and exploring technologies I don't get a chance to use at work, as well as writing tools to make my life easier

Endurance Sports: I love running and biking. I'm currently building up my endurance to run a marathon. I also ski and mountain bike when I can

Misc: I have two dogs, with whom I love hiking, camping and running with