

# Michael Lin

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## SUMMARY

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Hi. I am a software engineer. I architect highly available infrastructure for web-based systems, and build these systems by utilizing modern web frameworks (Ruby on Rails, Node, React, etc.) and cloud services (Kubernetes, etc.). I have participated in multiple different stages of the software development life cycle, including planning, deploying and maintaining. I also have a solid understanding of backend and frontend development concepts, such as data modelling, API design and UX design.

I'm extremely passionate about building tools that improve developer experience and development efficiency. Being a developer myself, I hope I can lessen the burden of other developers by taking care of all the heavy-lifting for them (e.g. implementing authentication, building hosting platforms), so that they can focus on their core business logic and ship software without worrying about any underlying complexities.

Outside of work, I'm an active participant in the open source world. I have contributed to multiple open source projects as well as written some of my own, including a plugin for VS Code (used by over 10k developers) and a tiny package for reusing browser tabs (used in over 50k projects). I strongly believe in sharing knowledge with the general public and giving back to the developer community.

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## EXPERIENCE

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### Software Engineer

**IBM** **May 2020 - Present, Toronto, ON**

- Designed and built highly available multi-tenant infrastructures with Kubernetes (both managed and on-prem) to serve millions worldwide.
- Built and owned hundreds of highly available datastore instances in a cloud-native way to support mission-critical services.
- Optimized and maintained CI/CD pipelines to accelerate production builds and deployments such that the team can ship multiple times per day.
- Led Internationalization (i18n) efforts that expand the ability to establish strategic partnerships with foreign corporations, ISVs, and governments.
- Took the lead in prioritizing project tasks and delegating them to the team; provided junior team members with close guidance and one-on-one mentorships throughout different projects.

### Software Engineer - Intern & Part-time Contractor

**IBM** **May 2017 - April 2020, Toronto, ON & Remote**

- Developed and scaled microservices for Cognitive Class Virtual Labs Environment with NodeJS, Rails, and Flask, supporting over 1M learners worldwide to practice hands-on Data Science experience.
  - Designed management console akin to the App Store Connect but for education with user experience in mind, built with front-end technologies such as ReactJS.
  - Designed and maintained monitoring infrastructure with Prometheus, and Grafana to monitor server utilization and database performance, provided actionable metrics to scale-up and scale-down servers as needed during traffic surge.
  - Organized and implemented users data tracking to maximize and measure the effectiveness of email promotion campaigns with Segment, Amplitude, and SendGrid.
  - Developed data pipeline and KPI reporting API endpoints to automate the data collection and reporting process for executive reports, widely used across the organization and improved workflow.
  - Performed DevOps practises, including infrastructure as code, automated testing, continuous integration, and continuous deployment of different services with Travis CI, Ansible, Terraform, Docker, and Rancher.
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## EDUCATION

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### Computer Science, BSc Specialization

University of Alberta · Edmonton, AB · May 2020

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## SKILLS

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**Languages:** JavaScript, Python, Ruby, HTML/CSS

**Frameworks & Tools:** NodeJS, Flask, Django, Rails, ReactJS, PostgreSQL, MongoDB, Docker, Kubernetes, Terraform, Ansible, Grafana, AWS Lambda, API Gateway, S3

**Industry Knowledge:** Web Development, Agile