

Ricky Fan

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EDUCATION

McMaster University

Bachelor of Applied Science in Computer Science

Hamilton, ON

Sept. 2019 – Present

EXPERIENCE

Software Developer Intern

May 2023 – Present

BlackBerry QNX

Ottawa, ON

- Learned about safety certified, POSIX compliant, microkernel RTOS – QNX. Experienced with interrupts, virtual memory and thread implementation on freestanding x86 architecture
- Developed a QNX internal PyPi package by leveraging JIRA and Jenkins APIs to automate change log request process

Software Developer Intern

Sept 2022 – April 2023

GEOTAB

Oakville, ON

- Debugged and fixed parallel tests failure due to race condition with mutex lock in C#, reduced test failure by 98%
- Refactored gRPC code in C# to improve maintainability and testability, wrote unit tests using mocks/stubs to achieve 100% test coverage
- Developed and maintained an automated pipeline tool to deploy test rigs by leveraging GitLab CI, Terraform, Kubernetes, Helm, and GKE
- Developed a CLI application using C# to deploy Terraform modules, perform health check and generate test report on Gateway test servers

Software Engineer Intern

June 2022 – Aug 2022

Publicis Sapient

Toronto, ON

- Developed an AI chatbot for a leading US telecommunication company using React, DialogFlow, and Java Spring boot with microservice architecture
- Developed two client – side microservices to query responses from DialogFlow AI agent, and handle SMS messaging (via Twilio API) for scheduled callback requests
- Integrated MySQL database with Spring boot to store client information and scheduled request details

Software Developer Intern

Jan 2022 – April 2022

CIBC

Toronto, ON

- Built an automation tool using Python (pandas) to track and validate server jobs migration from AutoSys R11.0 and MOA to AutoSys R11.36
- Documented the automation tool with Module Interface Specification (MIS), utilized Model View Controller (MVC) design pattern, unit testing done with pytest

PROJECTS

Th3rdplace

Feb 2020 – Aug 2022

- Built customised Docker images to containerize client and server applications, enabling the app to run on local, staging and production environments
- Developed a CI/CD pipeline in GitLab by integrating Cloud Build, Cloud Run and Firebase Hosting
- Configured and deploy CRON job with Cloud Function and Cloud Scheduler to enable weekly database backup

LiftJoint

May 2020 – Aug 2020

- Developed a full-stack web application using with Django serving a REST API with React as the frontend
- Client-side state management handled using Redux, used Bootstrap for responsive web design
- Configured token – based authentication to ensure high security and OAuth2 authentication for third party login
- Deployed and hosted the application on Digital Ocean, and configured a reverse proxy server using Nginx

TECHNICAL SKILLS

Languages: C#, Java, Python, C/C++, Bash, JavaScript, Haskell, HTML

Database/Frameworks/Tools: Firebase, MySQL, Bootstrap, Node.js, React, Redux, .Net, Django, Git, CSS, Flutter, pandas, Docker, GCP, Spring Boot, GitLab CI, Terraform