Rick Liu

(226) 505-9508   rick.liu@uwaterloo.ca   linkedin.com/in/rick-s-liu   github.com/ricksliu   ricksliu.github.io

Skills

Languages	JavaScript/TypeScript • Python • C/C++ • C# • Java • PHP • HTML/CSS • SQL
Technologies	React/React Native • Angular • Express • ASP.NET • Docker • AWS • Git • Jenkins

Experience

Ansys   Waterloo, Canada
Software Developer Intern   Jan 2024 – Apr 2024

- Co-developed unit testing framework in Node.js to verify deployment and properties of Azure resources
- Built telemetry library with tools and middleware to connect Express apps to Azure Application Insights
- Wrote extensive unit tests in Mocha/Chai and improved existing testing procedures and documentation

Capital One   Toronto, Canada
Associate Software Developer Intern   May 2023 – Aug 2023

- Led investigation into cross-platform frameworks as alternative to native mobile development
- Ported credit card pre-approval web app to iOS and Android using React Native as proof-of-concept
- Showcased findings in hour-long presentation to software directors and product stakeholders

Dealer-FX   Markham, Canada
Software Developer Intern   Sep 2022 – Dec 2022

- Improved AngularJS and ASP.NET vehicle check-in web app to fetch telematic data from GM vehicles
- Refactored Angular appointment scheduler and improved unit test coverage to reduce tech debt

Idea Notion   Markham, Canada
Software Developer Intern   Jan 2022 – Apr 2022

- Rewrote WordPress, Laravel and MySQL e-commerce store, obsoleting three third-party plugins
- Migrated 70k images to WEBP and applied optimization techniques, reducing initial data transfer by 15%

Financial Services Regulatory Authority of Ontario   Toronto, Canada
IT Systems Analyst Intern   Apr 2021 – Sep 2021

- Upgraded React, ASP.NET and MSSQL file submission portal to support hosting interactive web forms
- Extended in-house form language with new features to facilitate its adoption by three internal teams

Projects

AI Art Detector   GitHub – Fall 2023

- Trained CNN on 50k images using PyTorch to classify real and AI art with 88% precision and 94% recall
- Built RESTful Django and PostgreSQL backend and deployed it using Nginx, Docker and EC2 + ECR + RDS
- Created single-page Angular frontend and deployed it using Jenkins CI/CD pipeline and S3 + CloudFront

Education

University of Waterloo   Waterloo, Canada
Bachelor of Software Engineering (Expected) – 3.95 GPA   Sep 2020 – Apr 2025