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 • ASP.NET • Docker • AWS • Git • Jenkins

Experience

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

- Spearheaded investigation into feasibility of cross-platform frameworks as an alternative to native mobile
- Ported credit card pre-approval web app to iOS and Android using **React Native** as proof-of-concept
- Presented findings in 45-minute meeting to two directors of software and other interested stakeholders

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

- Enhanced **AngularJS** and **ASP.NET** vehicle check-in web app to display telematic data for GM vehicles
- Refactored pilot **Angular** appointment scheduler to improve code maintainability ahead of release
- Wrote unit tests using **Jasmine** to help existing products meet new code coverage requirements

Idea Notion Development Inc   *Markham, Canada*
Software Developer   *Jan 2022 – Apr 2022*

- Rewrote **WordPress**, **Laravel** and **MySQL** e-commerce store to obsolete three third-party plugins
- Converted 70k images to WEBP using **Node.js** scripts, reducing image file sizes site-wide by 20%
- Applied page speed tools to identify and implement **CSS** optimizations, improving mobile scores by 15%

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

- Upgraded **React**, **ASP.NET** and **MSSQL** file submission portal to support interactive web forms, allowing three internal teams to move away from fillable PDF forms and reduce manual data validation
- Expanded existing in-house form specification language with new components to facilitate migration
- Helped develop internal dashboard with workflow/validation tools to further reduce internal overhead

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)   *Sep 2020 – Apr 2025*

- **3.96** Cumulative GPA • **91.66%** Cumulative Average