Carl Zhang

c624zhan@uwaterloo.ca | (647)-852-2518

github.com/carlzproj | linkedin.com/in/carlzhangwat | CarlZWeb

Skills

Languages: Java | Python | C++ | C | C# | HTML | CSS | JavaScript | TypeScript | MATLAB | Verilog
Frameworks: ReactJS | Django | Django Rest Framework | Node.js | Bootstrap | .NET | JavaFX
Tools: Git | JIRA | Postman | Docker | Jenkins | DataDog | Helios | Agile | Heroku
Databases: MySQL | SQLite | SQL Server Management Studio

Work Experience

Top Hat Monocle | Full Stack Developer
Toronto (Remote), Canada | Jan 2022 – Apr 2022
- Developed an invites system to merge existing functionality through **REST API** endpoints utilizing **Django Rest Framework (DRF)** class-based views and **DataDog** for accurate user metrics tracking
- Integrated API endpoints in frontend applications using **React**, **Redux**, **Helios**, and **LaunchDarkly** feature flags to ensure smooth feature rollout, achieving production ready observability standards using traces, logs, and metrics
- Performed code-based **MySQL** database migrations to backfill data with minimal downtime
- Optimized **CRUD** operations by leveraging **Django** bulk actions to reduce database hits by over **99%**
- Implemented a **React** command palette to increase developer QA and unit testing productivity by **32%**

Top Hat Monocle | Full Stack Developer
Toronto (Remote), Canada | May 2021 – Aug 2021
- Lead development of 10+ web accessible **React** components, leveraging styled components to provide users with real-time content updates through user interface elements
- Created robust **React** & **Django** unit tests, utilizing **Jest** deployed on a **Jenkins** pipeline to reduce team wide code noncoverage from **4.6%** to **1%**

Ricoh Canada | Application Developer
Mississauga (Remote), Canada | Sep 2020 – Dec 2020
- Modified **.NET** websites using **ASP.NET MVC**, **HTML**, and **CSS** to align with client driven business specifications
- Migrated retiring **SharePoint Designer 2010** automation workflows to **Power Automate**
- Implemented an automated COVID-19 screening form using **Power Automate**, reducing work from office notice time by **89%**

Transport Canada | Software Developer
Ottawa, Canada | Jan 2020 – Apr 2020
- Streamlined the manual entry of data forms using **UiPath** and **optical character recognition (OCR)**, automating manual tasks to increase worker productivity by **77%**
- Researched multiple **OCR** technologies to optimally scan and identify QR codes, driver's licenses, and government application forms

Projects

SearchZRift | League of Legends Statistics Checker | 2022
- Created a user-friendly full-stack web app for displaying League of Legend player statistics using **React** & **Django**
- Leveraged **Axios** generated **HTTP** requests to fetch real-time user data from Riot's **3rd party API**
- Developed an algorithm to compute player ratings and game outcomes with an accuracy of **91%**

Education

University of Waterloo | Sep 2019 – Apr 2024
Bachelor of Applied Science | Computer Engineering | 3.6 Cumulative GPA
Relevant Coursework: Fundamentals of Programming | Algorithms & Data Structures | Systems Program & Concurrency | Real-Time Operating Systems | Compilers | Database Systems | Computer Networks