

Carl Zhang

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🎓 EDUCATION

University of Waterloo, B.ASc / Computer Engineering / 4A

2019 – 2024

- **Relevant Coursework:** Fundamentals of Programming | Algorithms & Data Structures | Systems Program & Concurrency | Real-Time Operating Systems | Compilers | Database Systems | Computer Networks

Waterloo, Canada

👛 PROFESSIONAL EXPERIENCE

SS&C Technologies, Full Stack Developer

Feb 2023 – present

Toronto, Canada

Top Hat Monocle, Full Stack Developer

Jan 2022 – Apr 2022

Toronto, Canada

- Created a REST endpoint for user invites and course enrollments with **Django (DRF)**, **Postman**, and **DataDog**, serving over 2 million users
- Integrated **API** endpoints into frontend applications using **React**, **Redux**, **Helios**, and **LaunchDarkly** feature flags, ensuring smooth and efficient feature deployment
- Implemented a **React** command palette, enhancing site navigation and **QA** testing productivity for over 100 developers
- Performed code-based **MySQL** database migrations to backfill data with minimal downtime
- Optimized **CRUD** operations by leveraging **Django** bulk actions to reduce query execution time by over **63%**

Top Hat Monocle, Full Stack Developer

May 2021 – Aug 2021

Toronto, Canada

- Spearheaded the creation of over 10 web-based **UI** components utilizing **React** and **styled components**, resulting in dynamic and responsive user experiences
- Implemented comprehensive unit tests, utilizing **Jest/Django** deployed on a **Jenkins** pipeline to reduce team wide code noncoverage from **4.6%** to **1%**

Ricoh Canada, Application Developer

Sep 2020 – Dec 2020

Mississauga, Canada

- Migrated retiring **SharePoint Designer 2010** workflows to **Power Automate**, ensuring uninterrupted automation processes for over 1500 employees
- Created an automated COVID-19 screening tool using **Power Automate** to meet health regulations and streamline return to office processes
- Customized website contents to meet client business specifications using **ASP.NET**, **HTML**, and **CSS**

Transport Canada, Software Developer

Jan 2020 – Apr 2020

Ottawa, Canada

- Leveraged **Tesseract OCR** and **UiPath** to automate data form entry, scaling down process time by **~70%**
- Developed a **RPA** solution using **OCR** technologies to classify identity documents with **94%** accuracy

📁 PROJECTS

CarlZAlgo

2023 – present

- Implemented an **LSTM**-based stock prediction model utilizing historical **OHLC** data resulting in a **8% CAGR**

SearchZRift 📄

2022

- Designed a **Django** and **React** based application, leveraging **Axios** generated **HTTP** requests to retrieve real time data from Riot's **3rd party API** to provide statistics on League of Legends gameplay
- Utilized **sklearn** decision trees to accurately predict game outcomes with a **91%** success rate

🧠 SKILLS

Languages (Java | Python | C++ | C | C# | HTML | CSS | JavaScript | TypeScript)

Frameworks (ReactJS | NodeJS | Django | Bootstrap | .NET)

Tools (Git | Jira | Postman | Docker | Jenkins | DataDog | Helios | Agile | Heroku)

Databases (MySQL | PostgreSQL | SQLite | SQL Server Management Studio)