

# Carl Zhang

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## Skills

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**Software** (Java | C++ | React | HTML | JS | CSS | SQL | Python (Django) | .NET | Power Automate | UiPath | JavaFx |)

**Technologies** (Git | JIRA | Postman | SharePoint)

## Professional Experience

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May 2021 – Aug 2021  
Toronto (Remote), Canada

### Top Hat Monocle, Full Stack Developer

- Maintained and developed on a portion of Top Hat's main web application
- Implemented front-end **React** architecture to match design, functionality, and accessibility requirements
- Created/updated **Django REST Framework** API endpoints for new features
- Created/updated unit tests with **Jest/Django** to enforce code standards

Sep 2020 – Dec 2020  
Mississauga (Remote),  
Canada

### Ricoh Canada, Application Developer

- Developed **.NET** web applications using ASP.NET **MVC Framework**
- Managed data from incoming business orders using **SQL** Server Management Studio
- Migrated retiring **SharePoint Designer** 2010 workflows to **Power Automate** flows
- Updated **Power Automate** COVID-19 survey process, to notify upper management/offices of employees coming to office

Jan 2020 – Apr 2020  
Ottawa, Canada

### Transport Canada, Software Developer

- Designed Robotic Process Automation (RPA) processes in **UiPath** and **BluePrism**
- Created **RPA** processes to streamline the manual processing of incoming application data forms
- Applied new Optical Character Recognition (**OCR**) technologies on: QR Codes, Driver's Licenses, Government application forms

## Projects

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2021

### CarlZWeb

- **React** portfolio website: [carlzweb.vercel.app](https://carlzweb.vercel.app) 🌐

2019

### Z-Hanz

- Developed a device to convert speech into handwritten text using Raspberry Pi 3B and **Python**
- Used stepper motors and servo motors to control CNC plotter
- Applied the SpeechRecognition 3.8.1 Python library

2018

### Type To The Future

- Worked in a pair to develop a **JavaFx** application designed to improve typing quality
- Designed a comfortable UI with **Scene Builder** and **CSS**
- Programmed several minigames to improve user engagement
- Web scraped online statistics to compare with user typing statistics

2017

### Z-Craft 🌐

- 2D Aircraft Shoot'em Up Game created with **Java** on Eclipse IDE
- Applied **Java** 2D Graphics, Listeners for visually stunning animations
- File I/O for storing highscores and login information

## Education

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2019 – 2024  
Waterloo, Canada

### University of Waterloo, B.ASc / Computer Engineering / 2B

#### Relevant Coursework:

- ECE 150: Fundamentals of Programming
- ECE 250: Algorithms and Data Structures (100%)