# Roni Wu

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## Skills

**Languages:** JavaScript, TypeScript, Python, SQL, Kotlin, Java, HTML/CSS, C/C++, GraphQL
**Tools/Technologies:** React, Vue, Express, PostgreSQL, MySQL, Node, Redis, Android SDK, AWS, Git, Linux/Bash

## Work Experience

### Full Stack Developer | Rodan Energy Solutions                      *Mississauga, Ontario*
Tools: Vue, Typescript, Python, Django, BeautifulSoup, MySQL            *Sept 2024 - Dec 2024*

- Developed and automated **10** web scrapers using **Python** and **BeautifulSoup**, which retrieve real-time and forecast locational pricing data from IESO reports, providing **90+** clients with up-to-date insights on Ontario's energy market
- Implemented a CRUD interface with advanced filtering functionality using **Django** and **Vue** for managing energy peak notifications from **11** regional energy providers
- Built a maintenance notice feature that allows admins to schedule platform-wide alerts that notify users in advance

### Full Stack Developer | Creator Now                                  *Los Angeles, California*
Tools: React, Typescript, Express, TypeORM, PostgreSQL, Redis           *Sept 2023 - Dec 2023*

- Led the development of an admin dashboard app for internal resource management in **React**, implementing **12** frontend pages and full CRUD functionality for users, content, videos, and lessons, enabling admins to streamline operations
- Developed a version editing tool for projects and user badges, boosting engagement by **15%** among **44k** daily users
- Built **RESTful API** endpoints with **Express** and **TypeORM**, optimizing **PostgreSQL** database performance through query tuning and **Redis** caching, reducing API calls by **32%**

### Product Designer | Super.com                                        *Toronto, Ontario*
Tools: Figma, Amplitude, Jira                                           *May 2024 - Aug 2024*

- Contributed **12** UI/UX enhancements to the Travel app, boosting booking conversion rates by **16%** across **540K** daily users
- Created design artifacts like high-fidelity wireframes and interactive prototypes in **Figma**, leveraged design system components and user data to inform designs, and clearly proposed ideas to stakeholders

### Full Stack Engineer | Applied Mind                                  *Ottawa, Ontario*
Tools: Vue, Typescript, Python, GraphQL, PostgresQL, SQLAlchemy, ZeroMQ, Jest     *Jan 2023 - Apr 2023*

- Designed and implemented a real-time messaging system using **ZeroMQ**, **GraphQL**, and pub/sub, req/rep architectures, delivering **100+** live sensor status messages to the frontend daily
- Developed a dynamic heatmap using **d3.js** to visualize sensor detection events, enabling users to filter and customize the display using **SQLAlchemy** and **TimescaleDB** queries that aggregate time-series data
- Built a CSV export tool enabling clients to filter and download sensor detection data, reducing manual review time by **82%**

### Frontend Developer | Ford Motor Company                              *Waterloo, Ontario*
Tools: React, TypeScript, Redux, HTML/CSS, Jest, MQTT, Linux            *May 2022 - Aug 2022*

- Developed **7** interactive and responsive widgets for the infotainment UI in the Ford Mustang Mach-E and F-150, integrating vehicle signal logic to reflect real-time data using the **Observer** pattern and **Redux**
- Migrated the Smart Hitch feature into its own **React** microservice, refactoring legacy code to improve maintainability

### Full Stack Developer | Lean Payments                                 *Waterloo, Ontario*
Tools: React, Redux, Node, AWS, PostgreSQL, Serverless                  *May 2021 - Aug 2021*

- Spearheaded the integration of **Redux** into the **React** codebase, refactoring architecture to streamline API data and user session management, reducing API calls and improving render time by over **1000 ms**

## Projects

### Topify | Database for Hit Songs on Spotify                          *May 2023*
Tools: React, Python, Flask, MySQL, HTML/CSS

- Developed a web app where users can search, view, and filter Spotify top songs in various countries
- Created **RESTful APIs** in **Flask** by writing complex **SQL** queries and built React components to display retrieved data

## Education

### University of Waterloo                                              *Waterloo, Ontario*
Bachelor of Computer Science                                           *Sept 2020 - April 2025*