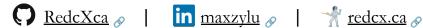
Max Lu



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SKILLS

- Languages: Go, C++, SQL, Java, Python, JavaScript, TypeScript, Ruby, HTML, CSS, C#
- Technologies: Git, Svelte, React, Flask, Next.js, PostgreSQL, Ruby on Rails, Linux, AWS, MongoDB, Kafka

WORK EXPERIENCE

Jun 2025 – Aug 2025 Geotab

Software Engineering Intern

Toronto, Canada

- Migrated tools platform from React to Next.js, using server-side rendering to reduce initial load times by 80%
- Developed LLM-powered scripts to generate metadata and summaries for 500+ documentation pages, improving SEO and enabling faster indexing + semantic search
- Created C# middleware to enable live tracking of vehicles, pipelining data to law enforcement for recovery

TikTok Sept 2024 – Dec 2024

Software Engineering Intern

Vancouver, Canada

- Enhanced internal tools using Go to display advertiser details and reduce developer reliance on other teams
- Extracted and transformed 30,000+ customer data from Hive and MongoDB using RPCs and message queues which improved internal service operation speeds by 35%
- Developed ElasticSearch data streaming pipelines using Kafka and event handlers to preserve data integrity
- Documented and refactored legacy code using modern standards and libraries to enhance maintainability

Tuq Inc. Jan 2024 – Aug 2024

Software Engineering Intern

Toronto, Canada

- Designed PostgreSQL schemas to support REST APIs functionalities built with Ruby on Rails
- Implemented **OAuth** to integrate various third-party APIs like Jira and Accuro to expand app functionality
- Used gems to enable core app functionalities including notifications, payment, and PDF rendering

PROJECTS

GooseGooseGo April 2024

- Developed a full-stack web application enabling user authentication and restaurant/item review submissions
- Implemented backend endpoints using Python & Flask and built the frontend with TypeScript & Svelte
- Created a MySQL database on AWS RDS to store detailed information of 500+ Google scraped restaurants

The Artificial Picasso Dec 2022

- Constructed a robotic arm capable of drawing on paper with servo motors (and a pen) via image inputs
- Built a graphical user interface offering tools such as image cropping and lineart sensitivity adjustment
- Developed algorithms in **Python** using **OpenCV** to convert images into arcs for the robotic arm to draw

AWARDS

Euclid Math Contest — Top 1.5% out of 20000

2021

Canadian Computing Competition (CCC) — Top 5% out of 4000

2021

American Invitational Mathematics Examination (AIME) — Top 12 in Canada

2020

EDUCATION

University of Waterloo

2022 - 2027 (Expected)

Bachelor of Software Engineering, Artificial Intelligence Specialization

Waterloo, Canada

- Academic standing: Term Distinction for all terms (GPA: 3.9)
- Relevant courses: Data Structures, Algorithms, User Interfaces, Databases, Operating Systems, OOP Design