

Celeste Luo

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Skills

Languages JavaScript, Python, TypeScript, Java, C/C++, PHP, Go, Ruby

Tools & Technologies Node.js, React, Django, AngularJS, PostgreSQL, Docker, AWS, Linux

Education

University of Waterloo

Waterloo, ON

BACHELOR OF COMPUTER SCIENCE

Sep 2022 - Apr 2027

- **Activities:** Women in Computer Science, Cybersecurity & Privacy Institute Student, Capture the Flag
- **Courses:** Data Structures & Algorithms, Object-Oriented Software Development, C/C++; 3.9 GPA

Experience

Software Developer, Build & Tools team

Waterloo, ON

PLAYSTATION (SONY INTERACTIVE ENTERTAINMENT)

May 2024 - present

- Optimized startup time from **minutes to seconds** for hundreds of Jenkins pipelines by fetching config files via the GitHub API
- Automated firewall configuration & deployment by integrating Akamai APIs into a Node.js/TypeScript client library & scripts
- Developed AWS Lambda function to query off-network resources for security allowlist policy tests

Undergraduate Research Assistant

Waterloo, ON

UNIVERSITY OF WATERLOO • DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE

Sep 2023 - Dec 2023

- Implemented Python SciKit random forest & other deep learning models for **network bandwidth prediction** research
- Evaluated existing systems on cellular downlink prediction using pandas, numpy, matplotlib, and Jupyter Notebook to process raw datasets and test & train models under different tree parameters

Security Software Developer

(Remote) Waterloo, ON

ISARA CORPORATION

May 2023 - Aug 2023

- Improved data export generation **efficiency by 85%** by implementing an Express.js module REST API endpoint
- Substantially increased data search and handling speed & capacity to **over 2 million records** by migrating a fundamental component of the technology stack to Elasticsearch within a tight deadline
- Built a **modular Jest unit testing** system utilizing JavaScript ES6 & TypeScript for maintainable and rapid test creation
- Integrated Elasticsearch into a React/TypeScript search client, with custom data querying syntax and fields using GraphQL
- Set up **automated Docker packaging** and PostgreSQL database provisioning scripts with SSL certificate configuration

Site Developer

Toronto, Ontario

COMPUTER PROGRAMMING CLUB @ W.L. MACKENZIE C.I.

Sep 2021 - Jun 2022

- Contributed to ctf.mcpt.ca, an online judge for cybersecurity challenges, hosting school-wide and provincial contests with **over 100 problems, 375 users & 5000 submissions**
- Developed an asynchronous client-facing module in JavaScript to **self-administer Docker** resources on-demand via REST API
- Designed and built a **mobile-responsive** user interface using Sass and Python Django class-based views

Honors & Awards

Women in Cyber Scholarship

FS-ISAC

Recipient; USD\$10 000, with year-long mentorship from Morgan Stanley Canada's CISO

2024

European Cyber Security Challenge

European Union Agency for Cybersecurity

1st Place (Team Canada) in international bracket, 10th of 34 countries, *focus: digital forensics*

2023

picoCTF Cybersecurity Competition

Carnegie Mellon University

1st Place in Canada, 3rd worldwide of 7794 teams / 18000+ students, *focus: digital forensics*

2022

CyberPatriot Cybersecurity Competition

US Air Force Association

1st Place in Canada, 5th worldwide of 5254 teams / 19000+ students, *focus: Windows OS security & networking*

2021, 2022

Projects

words-api Express.js API for random words by parts of speech; open source, 30+ stars on GitHub

Dark Docs Open source Google CSS Dark theme contributor; 46 000+ installs, 1000+ installs / week

