

# Daniel Qu

SOFTWARE DEVELOPER

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## Skills

**Languages** JavaScript/TypeScript, Python, C, C++, Bash, SQL, HTML/CSS  
**Frameworks** React, Redux, Express.js, Node.js, Flutter  
**Tools** Git, Linux, AWS (EC2, S3), Jenkins, Docker, Kubernetes, Jira

## Education

### University of Waterloo - 92% GPA

B.A.Sc. IN HONOURS MECHATRONICS ENGINEERING

Sep 2020 - Present

Waterloo, Canada

- Computer Structures & RTOS (C), Microprocessors & Digital Logic, Data Structures & Algorithms (C++)

## Work Experience

### PlayStation - Sony Interactive Entertainment

Sep 2022 - Dec 2022

DEVOPS SOFTWARE ENGINEERING INTERN

AWS, Kubernetes, Jenkins

- Deployed Promtail/Loki/Grafana stack using Helm to aggregate and display logs from 100+ Kubernetes pods across dozens of development teams, improving the accessibility of application logs.
- Wrote script to monitor and clean up unused AWS volumes using Python and Jenkins with Slack integration.
- Performed time-sensitive Jenkins server operations and upgrades during maintenance windows.

### PlayStation - Sony Interactive Entertainment

Jan 2022 - Apr 2022

FRONT END SOFTWARE DEVELOPER INTERN

React Native, Redux, Python, Jenkins

- Supported the 2022 PlayStation Plus release by implementing UI features in React Native and Redux.
- Wrote automated end-to-end tests in Python for dozens of checkout flows in order to deliver rigorous regression testing for the team.
- Achieved first prize in global hackathon with a team by creating a calendar app for the PS5.

### Dreamschools

May 2021 - Aug 2021

FULL STACK SOFTWARE DEVELOPER INTERN

React, Express, PostgreSQL, Stripe

- Addressed slow Stripe API calls by parallelizing/batching requests, improving load times by up to 10x.
- Developed complete messaging system and chat page using React, Express and PostgreSQL to provide SMS and email communication between clients.
- Overhauled checkout process by redesigning checkout UX and supporting additional payment methods.
- Took initiative to improve code quality by creating reusable React components such as modals.

## Projects

### Hexle - [Live Link](#)

Feb 2022 - Mar 2022

[GITHUB](#)

TypeScript, React, CSS

- Created a Wordle variant with a friend in React with over 250 monthly users.
- Refactored React state management and components to improve code quality and readability.

### Midnight Sun Driver Dashboard - Solar Car Team

Apr 2021 - Sep 2021

[GITHUB](#)

Flutter, Dart, Python

- Built digital dashboard for Midnight Sun's solar vehicle using Flutter including speedometer, battery life.
- Performed virtual integration testing by mocking vehicle CAN messages to send to the dashboard.
- Effectively used animations to direct driver attention to appropriate locations on the dashboard.