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Languages Technologies Python, Rust, C++, JavaScript, TypeScript, Kotlin, SQL, Java

Technologies Svelte, AWS, Google Cloud, React, Terraform, GraphQL, Express.js, Node.js, PostgreSQL

# Experience -

Statsig · Software Engineering Intern

May 2025 - August 2025

## **Kortex** · Software Engineering Intern

January 2025 - April 2025

- Implemented CRDT-based version history with yjs and S3, enabling diffing and time travelling for shared documents.
- Migrated **Django** models to incorporate hotkey-rebindings and granularized user-workspace settings.
- Ensured comprehensive keyboard operability across components to improve accessibility and user experience.
- Modularized components to reduce latency and workflow friction and added support for emoji selection.

### **Texada Software** · Core Services Developer Intern

May 2024 - August 2024

- Integrated Codebuild tests into pipeline pre-deployment to eliminate need of lab environments, saving \$32,000/year.
- Leveraged **VPC** to access private API endpoints and achieve **98%** test coverage with strict type parsing using zod.
- Automated pipeline to trigger build test on PR and customized slack messages with **Eventbridge** and **Lambda**.
- Migrated **Auth0** settings to **Terraform** to facilitate scalable multi-region identity management.

## **SnapPea** · Software Engineering Intern

September 2023 - December 2023

- Architected **Electron** dashboard and Android app with **BME688 Gas Sensors** and provide gas detection and prediction.
- Increased project revenue by \$25,000+ by integrating digital marketing analytics and solutions with Google Cloud.
- Deployed a Shopify app hosted on Heroku to automate new product imports, orders, and fulfillment.

## McAfee · Fullstack Software Developer Intern

January 2023 - April 2023

- Analyzed dataset of 30M+ users to diagnose system failures, catching 28 errors relating to domains and data sources.
- Redesigned module mocking for React hooks and Redux stores, resulting in 21% reduction in post-release bug reports.

### **MakeSens** · Software Developer Intern

May 2022 - August 2022

- Developed an Android app to integrate with **Bluetooth Low Energy** and analyze torsion stress on axles.
- Designed a simulation framework for hydrogen pipeline stress analysis and leak detection using **React** and **Amplify**.

### **University of Calgary** · Cancer Research Student

February 2019 - July 2020

- Studied genes relevant to Low Grade Glioma to observe the relationship between mRNA expressions and survivorship.
- Produced **Kaplan-Meier** graphs and implemented the **Log Rank Sum Test** to determine the significance of survival between quartiles and identify potential oncogenes and tumour-suppressing genes to serve as prognostic biomarkers.

# Projects ·

## Lodestone 🖸

- Launched server hosting tool for multiplayer games with 6000+ downloads, 500+ monthly users, 700+ Github Stars.
- Implemented features for the **React** frontend using TypeScript, including console filtering and credential updates.
- Architected dynamic server creation by incorporating git with **Rust** to enable version control of the server at runtime.

### Graku 🖸

- Created a grade management system to dynamically calculate and store grades in real time with a user interface using **Svelte** and backend a **DynamoDB** integrated using **AppSync** and **GraphQL**.
- Designed an algorithm to parse equations to account for dynamic user-defined grading systems.

## lago [♂

• Developed an Othello and Go AI in **Python** and **Tensorflow** that employs reinforcement learning and implements the **alphazero** algorithm applicable to all two-player perfect-information zero-sum games.

### Lyrr 🖸

- Fine-tuned **Huggingface GPT2** model on 1000+ lyric samples in **PyTorch** to create a style-based lyric generator.
- Refactored using AWS CDK to deploy on Lambda with ECR Docker Container, connecting frontend with APIGateway.

### **Education** –

### **University of Waterloo**

Bachelor's Degree, Software Engineering Honours (2021 - 2026)