

# Jofred Cayabyab

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## Education

### University of Calgary

- Bachelor of Science in Software Engineering

Sep 2017 – May 2022

GPA: 3.95/4

## Experience

### Amazon [Software Development Engineer Intern](#)

Jul 2021 – Oct 2021

- Streamlined customer UX by implementing contextual enhancements to Smart Alerts, to be deployed to **>3 million users**
- Reduced Alexa Guard Alert vacuum-related false positives by up to **90%** by implementing an event-driven device status querying system
- Decreased service calls by **~50%** by creating caching system for contextual enhancement-related information using DynamoDB
- Created detailed design document, development guide, and workflow diagrams ensuring knowledge transfer for new and existing team members to maintain and build upon project

### Replicon [Software Developer Intern](#)

Sep 2020 – Jul 2021

- Accelerated automated development environment deployment speed by up to **10x** by refactoring deployer service to automatically instantiate ECS tasks as needed
- Improved future development speed by up to **2x** on Ember.js repo by refactoring legacy code to follow current best practices
- Increased CI/CD pipeline stability and configuration flexibility by refactoring pipelines from Elastic Beanstalk to ECS Fargate
- Enhanced customer experience and customizability in Polaris application by implementing custom tagging and filtering on human resource requests through React and GraphQL

### Code the Change YYC [Director of Technology & Project Lead](#)

Nov 2019 – Jun 2021

- Led a team of 5 students to develop a language model for the YWCA to classify critical incident reports
- Achieved **>70%** test classification accuracy on a language server for intelligent autocompletion and client risk assessment using FastAPI and SK-Learn
- Reduced at-risk client response time by **~200%** by implementing NLP-based automated risk assessment and alerting procedure

### Encana [Student System Analyst](#)

May 2019 – Aug 2019

- Saved **30 hours per month** of repetitive data-entry work by automating administrative processes using UiPath and FME
- Eliminated invoice processing error rates by **99%** by writing an invoice parsing RPA in UiPath
- Streamlined asset management by creating interactive report generation software with Oracle PL/SQL scripts

### Student Organization for Aerospace Research [Software Developer](#)

Sep 2018 – May 2019

- Implemented automatic parachute deployment by programming sensors and equipment on STM32 microcontrollers
- Reduced failure rates by **50%** by designing a malformed packet recovery system using a byte-stuffing algorithm in C
- Improved testing and debugging workflow of avionics software by developing a ground system signal simulator in Python

## Projects

### YWCA NLP Report Classifier [github.com/Code-the-Change-YYC/YW-NLP-Report-Classfier](https://github.com/Code-the-Change-YYC/YW-NLP-Report-Classfier)

Mar 2020 – Jun 2021

- Custom critical incident report completion process with intelligent ML-based autocomplete and automatic risk assessment
- Currently used by the YWCA for internal critical incident reporting and monitoring

### VimRace [vimrace.com](https://vimrace.com)

May 2020 – Sep 2020

- Multiplayer browser game built with React and socket.io where users can race against each other in a browser-integrated Vim terminal
- Over **500** unique users since initial deployment

### datespot [datespot.surge.sh](https://datespot.surge.sh)

Nov 2018

- Built a map-based website to recommend nearby date locations and ideas
- Designed a date location recommender algorithm using Google Maps API

## Skills

**Languages:** JavaScript, Python, Java, C++, C, Terraform, SQL, HTML, CSS, VB.NET, MATLAB, Bash, GraphQL

**Tools and Technologies:** React, Redux, Node.js, Express, MySQL, PostgreSQL, NumPy, Pandas, SK-Learn, Flask, FastAPI, Oracle, socket.io, MongoDB, UiPath, Git, AWS, Ember.js, Apollo GraphQL, Ariadne GraphQL, Terraform, Figma