## **Dragon Prevost**

 $\label{eq:www.dkp.io} www.dkp.io\\ github.com/dragonprevost$ 

## LANGUAGES AND SKILLS

ullet Python ullet Typescript ullet Go ullet Machine Learning ullet Web API ullet OOP ullet Functional Programming ullet Algorithms

EDUCATION

University of Victoria

Victoria, BC

Email: dragon@dkp.io

Mobile: (604) 902-0904

9101 Riverside Dr. Whistler, BC

Bachelor of Science in Computer Science

April 2021

University of Victoria

Victoria, BC

Diploma in Business Administration

 $April\ 2015$ 

EXPERIENCE AND PROFICIENCIES

MazumaGo

Vancouver, BC

Software Engineer

September 2021 - Current

Web Architecture: Utilized Django rest framework to develop a financial banking ledger and API.

**Product Ownership**: Effectively owned various portions of the product through planning, creating product specifications and, allocating engineering resources.

**Communications**: Collaborated with sales/growth team to improve product iteration and feature development. **Authentication**: Implemented a flexible multi-factor authentication system using openID and Json Web Tokens.

Urthecast

Vancouver, BC

Machine Learning Engineer

April 2020 - Jan 2021

Pre-processing: Automated Earth observation data processing pipelines for training machine learning models.

Customer Relation: Regularly presented project progress and results to internal and external stakeholders.

Architecture: Contributed to the development, architecture, and design of scalable machine learning products.

**Regression Models**: Applied XGBoost's Random Forest regressor models to predict soil moisture from various Earth observation products such as the European Space Agencies Sentinel platform.

**Segmentation Networks**: Trained, tuned and evaluated a Feature Pyramid Segmentation Network to classify active wildfires via Earth observation data sets.

UVic Aero Club

Victoria, BC

May 2017 - April 2020

Software Lead

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**Networking and Communications**: *Python's socket* library to implement *UDP* video streaming platform.

Electrical Systems: Soldering, motor control, and serial protocol applied to ground vehicle control system.

**Leadership and Project Management**: Executive leader for a team of 10+ software developers through various aerospace projects. Using development tools and concepts such as *Git*, issues, backlogs, and pull requests.

**Interdisciplinary Operation**: Practiced communication and development through various interdisciplinary projects involving software, electrical and mechanical engineers.

**SES** Consulting

Victoria, BC

Software Engineer Co-op

January 2019 - Aug 2019

**Front-End**: Utilized cutting edge front-end tools such as JavaScript, React and Storybook. Optimization of state management in a web application with resources such as React's *hooks* and *context*.

**Back-End**: Endpoint development using the *Django* framework and *PostgreSQL DBMS*.

Agile Development Process: Exercise the scrum agile development process with Jira and Git.

Data Structures: Reduce front-end render time via data structures such as adjacency matrices and hash tables.

Design System: Component library for a React development team to quickly access properties of components.

**Barnacle Systems** 

Victoria, BC

Software Engineer Intern

Oct 2017 - Dec 2017

**Embedded C**: Develop daemons on the Legato framework to monitor the accelerometer on an IoT platform(mangOH WP85). Made use of Industrial Input-Output and low-level device drivers.

Software Deployment: Oversee deployment and managing software updates to a network of IoT devices.

**Linux and Drivers**: Work with a custom Linux distribution while developing low-level daemons on a marine vessel IoT device. Experience with drivers, micro-processors, IIO, and systems.

## Projects

Echo Synth: Synthesizer written in Python, designed to modify and recreate sounds that occur in the natural world.

Battle Snake: A-Star shortest path algorithm applied to a bot that plays a competitive game of snake.

Collaborative Playlist Generator: Web application for automating collaborative playlists using the Spotify API.

**Distributed Video Annotation**: A distributed architecture with *Python* and *Kubernetes* to annotate video context.

Cognitive Load Classifier: Boosted tree classifier trained to identify the presence of cognitive load from EEG input.