James Hill

RELEVANT WORK/RESEARCH EXPERIENCE

JSI Telecom

September 2023 – December 2023

Software Developer Co-op

Ottawa, 99 Michael Copland Dr.

- Gained experience developing web applications with JavaScript, C#, Java, Docker, Kubernetes, SQLite and Kafka, as well as version control technologies such as git and tfs.
- Gained experience with Angular/Ruby full stack web application development.
- Collaborated with multiple developers over a wide array of teams to fix bugs and roll out new builds.
- Worked in an agile project management approach.
- Developed grunt tasks for cache control purposes.

MHPD Health Canada

May 2019 – September 2021

BI-2 casual Ottawa, 335 River Rd

- Automated office tasks with VBA.
- Worked in regulated, data-rich environments
- Developed experience with DSTS, DPD, docubridge, and Canada Vigilance Adverse Reaction Database
- Demonstrated analytical and research skills while writing PBRERs

ESTS Environment Canada

Sept. 2018 – April 2019

Oil properties analyst

Ottawa, 335 River Rd

- Used MATLAB to build least square regression models (PCA, PLS regression) of ft-IR based oil spectra for prediction of SARA (Saturates, Aromatics, Resins and Asphaltenes) components of neat oils
- Experience with GC-MS, ft-IR (ATR and Transmission based) and fluorometry.
- Responsible for performing statistical analysis and writing code in MATLAB and VBA.

Honor's Project (Bioinformatics)

September 2019 – April 2020

Student

Ottawa Hospital Research Institute, 1053 Carling Avenue

- Investigated p-value biases of DESeq2 using permutation testing.
- Gained experience in differential gene expression analysis using R packages such as DESeq2
- Developed experience in cloud computing using Compute Canada servers for computationally heavy experiments requiring multiprocessing.
- Designed permutation testing analyses methods for DESeq2 differential gene expression analysis using R.

Freelance Work

Software Developer - AI trainer (contract) - Data Annotation Tech

January 2024 - Present

- Prompt engineering with various parameters and producing assessments of results Quality Assurance for other analysts' work (prompts, code, feedback, conversations, instruction-following, etc.)
- Annotated and corrected code in python, JavaScript, csharp, rust, c++, java, kotlin, and bash
- Reviewed AI responses regarding many different api's including azure vault, aws, next.js, pandas, etc...

Projects

Implementation of Pluribus AI Poker Bot (C++/C)

- Implementation of poker AI using Counterfactual regret.
- Created Poker Engine using basic OOP principles.
- Designed a thread safe MCCFR model to create the ai's blueprint strategy.

Ocean Change App

- Application designed to help fisherman report useful observations to the Oregon Department of Fish and Wildlife.
- Tech Stack: Flutter/Dart, Firebase/Firestore, Hive, Xcode, TestFlight

Portfolio Website

- Created using NextJS, React, Tailwind CSS
- Deployed with Vercel (Check it out at https://coat-portfolio.vercel.app)

EDUCATION

Oregon State University

Graduated August 2024

Computer Science Bachelor's Degree (Postbacc)

■ 4.0 GPA

University of Ottawa

Graduated Magna Cum Laude in April

2020

BSc. in Biochemistry with honors, specialization in Biochemistry (Co-op)

Ottawa, ON

SKILLS

C++/C

C#

Java

Linux/Bash

JavaScript (Node/React/Angular)

Kubernetes/Docker

SQL/SQLite

AWS

Next.is

Firebase/Firestore

HTML/CSS/ Tailwind CSS

Flutter/Dart

Python

Ruby

MATLAB/VBA/R

LANGUAGES

English: Fluent French: Proficient Chinese: Intermediate