James Hill

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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

Ottawa, 335 River Rd

Oil properties analyst

- 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 2023 – 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

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) \square Ottawa, ON

SKILLS

C++/C

C#

Java Linux/Bash

JavaScript (Node/React/Angular)

Kubernetes/Docker

SQL/SQLite

AWS

Next.js

Firebase/Firestore

HTML/CSS/ Tailwind CSS

Flutter/Dart

Python

Ruby

MATLAB/VBA/R

LANGUAGES

English: Fluent French: Proficient Chinese: Intermediate