

# James Hill

jhill044@uottawa.ca ❖ (343) 777-8476 ❖ Ottawa, Ontario

<https://coat-portfolio.vercel.app>

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## RELEVANT WORK/RESEARCH EXPERIENCE

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### JSI Telecom

*Software Developer Co-op*

**September 2023 – December 2023**

*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

*BI-2 casual*

**May 2019 – September 2021**

*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

*Oil properties analyst*

**Sept. 2018 – April 2019**

*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)

*Student*

**September 2019 – April 2020**

*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

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### 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

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### 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

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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

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English: Fluent

French: Proficient

Chinese: Intermediate