Jack Cochran

<u>linkedin.com/in/jackscochran</u> <u>github.com/jackscochran</u>

Proficient in a variety of programming languages and technologies, I am a skilled software engineer and web developer with experience in data analysis and artificial intelligence. Seeking a challenging and rewarding software engineering position where I can use my technical expertise to drive innovation and growth.

Work Experience

AltoSante Business & Technical Analyst

Sep 2022-Present

Digital Health Venture Studio

Calgary, Alberta

- Working part-time along my studies to provide business and technical support for AI driven healthcare startups
- Developed valuation models for clients to determine what amount of capital is suitable at different funding stages
- Providing software development support to companies such as integrating AI models into production environments

Precision Nutrition Contracted Data Analyst June 2022—Sept 2022

Nutrition Certification Platform

Toronto, Ontario

- Tailored a recommendation on where PN should make investments in terms of their long term marketing strategy
- Scraped data from Tiktok, Instagram, Youtube and Reddit using Python and Selenium to determine traffic trends
- Executed a cross platform keyword analysis using google trends and platform user data

CIBC Data Analytics & Integration Co-op Summer 2022

Digital Analytics Department

Toronto, Ontario

- Documented and visualized the data architecture of the analytics team including data sources, flows, and outputs
- Lead a team of three co-op students and re-designed the web portal that displays dashboards for other teams within the bank using Javascript, Angular, PHP and SQL
- Designed and documented a github workflow that is now used by the team to track and manage changes to code
- Collected and analyzed data using SAS to investigate rising re-registrations on CIBC's website, made a recommendation for a solution to executives at the bank which was accepted and initiated

CIBC Web Developer Co-op Summer 2021

Web Development Team

Toronto, Ontario

- Developed and tested various web pages, maintaining up to date content on CIBC's front-end
- Designed a web form validation library which saved ~300 lines of javascript code for each form it was implemented
- Collaboratively developed code using Github in an agile team of experience engineers

Education and Certifications

Bachelor of Engineer Science, Software Engineering

Expected April 2024

University of Western Ontario | GPA: 4.0, Dean's Honour List

Completed coursework: Software Design, Linear Algebra, Calculus II & III, Data Structures & Algorithms, Statistics, Discrete Math, Scripting

Bachelor of Arts, Honours in Business Administration

Expected April 2024

Ivey Business School | GPA: 3.7, Dean's Honour List

Completed coursework: Strategy, Marketing, Communications, Operations, Finance, Decision making with Analytics, Accounting Fundamentals, Leveraging Information Technology

Technologies and Languages

- Languages: Python, JavaScript, HTML/CSS, Java, C#, SAS
- Technologies: SQL, Git, Excel, Heroku, AWS, MongoDB, REST API
- Frameworks/Libraries: Express.js, React, Flask, NumPy, Pandas, Scikit-learn, Jupyter Notebook

Projects

- **Deepstone Capital Management** Created a development environment in Python that was used to create and test various stock portfolios, machine learning algorithms and feature sets to find what configuration yields the greatest returns over a 25 year time frame. Stock and financial data on over 10,000 companies was web scraped and cleaned to create the training set.
- **Movac Website** Built for Alberta based Hydrovac Truck company Movac. Created and implemented the website designs using wordpress/elementor and includes functional contact form with spam protection: https://movac.ca
- **Connect 4 AI** React/Python Connect 4 web app with playable AI that uses the MiniMax Algorithm for decision making. Backend is created using Flask and is hosted on Heroku: https://playable-connect4.herokuapp.com/

Extracurricular Activities & Interests

Western Men's Varsity Volleyball

Sept 2019 - Present

- Balanced 30 hours per week of team activities with full engineering and business course load, achieving Academic Canada each year
- Learned how to take and give constructive feedback and apply it to improve myself and the team
- Engaged in deep analysis of competitors weekly through review of film and statistics

Harvard's CS50 Online Courses

Summer 2020 - Summer 2021

• Completed online courses Intro to Computer Science, Intro to Artificial Intelligence with Python and Web Development with Python and Javascript

Western AI Club Winter 2020

- Gained experience implementing basic machine learning algorithms with supervised learning techniques such as regression, decision trees, and neural networks
- Built a house price prediction model based on attributes such as square footage that had an r squared value of 88%

Guitar & Music 2014-Present

- I have recently picked up playing the electric guitar
- Grew up playing music completing my level 8 Royal Conservatory of Music Exams for Piano
- Learned Trumpet, Bass, Percussion, and Saxophone in High School for the Calgary Marching Band