Frederick Wang

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Education

UNIVERSITY OF BRITISH COLUMBIA | BSC IN COMPUTER SCIENCE AND STATISTICS (4TH YEAR) | EXPECTED: MAY 2026

Cumulative Average: 90% (Dean's List: 2022-2025)

Awards: Trek Excellence Scholarship (2022), J. Fred Muir Scholarship (2022)

Relevant Coursework: Advanced Relational Databases, Machine Learning and Data Mining, Data Structures and Algorithms, Software Design, Computer Hardware and Operating Systems, Statistical Inference

Technical Skills

Programming Languages: Python, R, SQL, JavaScript, Java, C++, C, Assembly

Data & Analytics: Databricks, Great Expectations, Power BI, SQL Server, PostgreSQL, Oracle SQL*Plus

Cloud & Web: AWS (Bedrock, S3, OpenSearch), Azure, Node.js, HTML, CSS

Development Tools: Visual Studio Code, Unix/Linux, Git, Jira

Work Experience

DATA AND ANALYTICS INTERN – BCI | MAY 2025 – AUGUST 2025

- Extended Great Expectations Python library with SQL Server MI support for Databricks integration, contributing enhancements to the official open-source repository
- Optimized platform operations and drove adoption across multiple teams through technical demonstrations, improving system reliability and expanding user base
- Won internal hackathon with schedule optimization algorithm (5% efficiency gain), now leading production development of revenue-maximizing solution for portfolio cleaning client

UNDERGRADUATE TEACHING ASSISTANT – UBC | SEPTEMBER 2024 – APRIL 2025

- Assisted in delivering lecture material and providing personalized support for a large data science course, using practical examples and data science methodologies in R and JupyterLab to clarify complex concepts
- Contributed to the grading of projects and assignments, as well as the invigilation and marking of exams

DATA ANALYST – PROVIDENCE RESEARCH, ST. PAUL'S HOSPITAL | JANUARY 2024 – AUGUST 2024

- Utilized R and RStudio to clean, analyze, and model ankle surgery outcome data for visualization and statistical testing to extract insights
- Managed multiple project databases, ensuring accuracy and consistency across research studies

Technical Projects

GREENLIFE – UBC CIC GENERATIVE AI AND SUSTAINABILITY HACKATHON (1ST PLACE) | OCTOBER 2024

- Built a full-stack website with Next.js to enhance accessibility and personalization of government sustainability financial incentives for Canadian residents and businesses
- Leveraged AWS Bedrock foundation LLMs and implemented Retrieval-Augmented Generation (RAG) using Python with AWS OpenSearch and an S3 knowledge base of Canadian sustainability programs

WEALTHCOMPLEX – SIMPLE INVESTMENT MANAGEMENT PLATFORM| SEPTEMBER – DECEMBER 2024

- Developed a full-stack mock investment management platform using Node.js, allowing users to trade, manage funds, and research equities
- Optimized database efficiency by learning and applying normalization techniques and designing efficient entity-relationship schemas with Oracle SQL*Plus