Xinghao Huang

BSc Statistics, Year 3

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Education

University of British Columbia Kelowna & Vancouver, BC

Bachelor of Science: Major in Statistics Sep, 2023 – Present

Honours:

- Go Global International Learning Programs Award May, 2025
- Dean's List 2023 W May, 2024

Technical Skills

Languages: Python, R, C++, Java, SQL

Data Science & Statistics: EDA, data cleaning, data visualization, statistical inference, regression models, ANOVA, hypothesis testing, A/B testing, confidence intervals, prediction

Computer Science: OOP, data structures & algorithms, pointers & memory management, Big-O

Libraries: Pandas, NumPy, tidyverse, ggplot2, Altair, scikit-learn, Flask, React, JUnit

Tools: Git, GitHub, Jupyter, RStudio, VS Code

Academic Projects

Airbnb Prices Analysis (Jupyter & R) Sep, 2025 – Dec, 2025

- Conducted an end-to-end inferential analysis on Athens Airbnb data, performing data wrangling and classical inference using Multiple Linear Regression (MLR) to identify key pricing determinants.
- Collaborated to implement advanced modelling techniques, including dataset splitting for unbiased inference, Variance Inflation Factor (VIF) analysis, and nested F-tests for variable selection.
- Optimized model validity by conducting rigorous diagnostics (linearity, normality) and applying log-transformations, while leading the R coding workflow and interpretation for the final group report.

Canadian Fire Visualization (Jupyter & Python) Sep, 2025 – Dec, 2025

- Collaborated to analyze the Canadian National Fire Database, developing a robust coding scheme to standardize inconsistent fire-cause labels and handle missing data across decades of records.
- Engineered two interactive dashboards in Altair featuring multiple visualizations: a geospatial frequency map for regional distribution and a severity analysis using jittered strip plots and lollipop charts to identify extreme fire events.
- Designed intuitive metaphors, such as custom flame markers and thermometer-style axes, to visually communicate fire severity trends to non-technical audiences.

Simple Music Player (Java) Jan, 2025 – Apr, 2025

- Architected a robust object-oriented application for managing and playing music, implementing a Java Swing GUI with interactive playlist management.
- Engineered a persistent data layer using JSON serialization to save and reload user libraries and preferences across sessions.
- Designed a modular system utilizing the Singleton Pattern for global event logging and Iterator Pattern for

traversal, validated by comprehensive JUnit test suites.

Personal & Non-Academic Projects

UBC Live (Python) – *UBC Data Science Club* Nov, 2025 – Present

- Contributing to a student team building a real-time analytics platform to predict campus study-space availability and bus crowding.
- Working with the subgroup responsible for UBC Workday data, assisting in identifying accessible data sources, and understanding data governance requirements.
- Standardizing raw HTML data into structured CSV datasets to support the team's student density modeling, ensuring strict adherence to schema requirements.

SkySync (Python, JavaScript, CSS) – *HackCamp 2025* Nov 15, 2025 – Nov 16, 2025

- Developed a weather-responsive music recommendation platform during HackCamp 2025, collaborating in a 4-person team to ship a working Minimum Viable Product (MVP) within a 18-hour deadline.
- Spearheaded the frontend interface development, designing and implementing a responsive web layout to visualize real-time data and ensure a seamless user experience.
- Engineered the Flask backend to integrate OpenWeatherMap and Spotify APIs, mapping real-time meteorological data (e.g., rain, temperature) to mood attributes for dynamic playlist generation.

Additional Experience

Fudan International Summer Session 2025 Shanghai, China

UBC Go Global Summer Abroad Program Jun, 2025 – Jul, 2025

- Completed 5 UBC-transferable Arts credits through an international exchange program, gaining academic and cultural experience at one of China's top universities.
- Led a 5-person team in a comparative analysis of US-China AI Competition, synthesizing geopolitical and technological perspectives to deliver a final presentation on global tech policy.

China CITIC Bank — Talent Program Participant Changchun, China

Certificate of Completion Jul, 2024 – Aug, 2024

- Participated in a youth talent program hosted by China CITIC Bank, receiving introductory training in banking operations, financial products, and customer service practices.
- Engaged in community outreach activities, including supporting children with congenital autism through volunteer visits and interactive sessions.
- Delivered the closing ceremony speech on behalf of all participants and contributed to a group presentation summarizing program insights.