

Tiffany Chu

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EDUCATION

University of British Columbia	2025 - Jul 2026
M.Sc. in Data Science	
◦ Scholarship recipient, 93% average	
University of British Columbia	2019 - Dec 2023
B.A. in Cognitive Systems, minor in Commerce	
◦ Entrepreneurship@UBC accelerator venture program	
◦ UBC Current Dragonboat Team - qualified for Nationals and Worlds Championships	
BrainStation	2024 - Apr 2024
Accelerated Data Science Diploma	

EXPERIENCE

Research Analyst	Feb 2025 - Present
<i>Lodestar Media Inc</i>	
◦ Developed scalable ETL pipelines using Python notebooks, Power Query, and VBA, improving speed and accuracy of weekly BIV lists	
◦ Built a new PostgreSQL database in pgAdmin to merge and transform multiple raw tables to derive key insights from 30,000+ company records, 20,000+ contacts, and historical executive data	
Technical Research Assistant	Sept 2024 - Jan 2025
<i>Rural eMentoring BC</i>	
◦ Managing the Natural Language Processing Tool website for automated data analysis and deriving insights from user relationships	
Research Assistant Volunteer	2023 - Dec 2024
<i>Oculomotor Lab - Department of Visual Sciences, UBC</i>	
◦ Conducted experiments using the EyeLink eye tracker with participants, analyzed audio files in Python notebooks, created graphs and experiment design diagrams, and synthesized audio features into .csv spreadsheets	
◦ Documented and synthesized research for literature review and project ideation.	
Data Science (NLP) Research Intern	May - Aug 2024
<i>UBC Data Science Institute</i>	
◦ Managed and manipulated large datasets with 10000+ user entries, leveraging machine learning models to uncover insights, created reports and visualizations to communicate complex data insights into practical solutions	
◦ Developed an app with text preprocessing/ cleaning and NLP models including question-answering models, summarization, mood detection, and recommender systems	
◦ Conducted exploratory data analysis and applied time series analysis (using Prophet) to uncover and predict trends	
Marketing Analyst Intern	Sept - Dec 2022
<i>Pawsome Concierge</i>	
◦ Conducted competitor and market analyses to identify partner opportunities and growth initiatives	
◦ Designed a comprehensive client acquisition proposal outlining the pricing terms, value proposition, and timeline	
◦ Enhanced marketing initiatives by translating market data, delivering insightful reports with statistics and visualizations	

Byte Camp

May - Aug 2020

Computer Programming Instructor

- Successfully taught computer applications such as Blender, OBS, Inkscape, and Godot (in Python) for weekly groups of 30 high school students alongside partner instructor

VOLUNTEERING AND MENTORING EXPERIENCE**Patient Partner and Research Assistant**

Jan 2023 - Present

UBC School of Nursing

- Supervisor: Dr. A. Fuchsia Howard
- Research Project - Analyzing transcripts from intensive care unit (ICU) survivors using computational methods to identify the challenges people experience after hospitalization that might contribute to an unplanned readmission
- Aided in the knowledge translation of a longitudinal Photovoice Study of ICU Survivors. Successful CIHR grant funding. Research paper and virtual exhibition in progress.

Founder and President

2020 - 2021

Unload Canada (UBC Chapter)

- Responsible for planning conferences with professors, and collaborated with other organizations (Kaleidoscope, Music for Mental Health, QPR training)

Volunteer Coding Instructor

2019 - 2020

The C.O.D.E Initiative

- Successfully trained a group of students in coding the Sphero SPRK+ robot by guiding students to think programmatically when solving errors in their code

Mentor

2020 - 2021

LEAP Canada

- A role model to incoming first-year students, collaborated with industry professionals and peers to deliver a presentation to an audience of over 200 students

PROJECTS**Latent Content Analysis of ICU Photovoice Transcripts**

- Created a pipeline using Python to analyze qualitative data, including CSV and Word-to-JSON converters, text preprocessing, embeddings/vectorization, and performance metrics (coherence, perplexity).
- Used topic modeling and other natural language processing techniques to identify themes in ICU patient transcripts and photos.

Anomaly Detection of Congressional Investments

- Identified congressional insider trading using data from the Senate Stock Watcher API.
- Implemented unsupervised ML ensemble methods (autoencoders and hierarchical clustering) to flag suspicious transactions and trading patterns.

RELEVANT SKILLS**RELEVANT SKILLS**

Programming: *L^AT_EX, Python, VBA, C++, Racket, R, HTML/CSS/Javascript, SQL, Matlab*

Technologies: *Docker containers, Git, AWS, big data frameworks (Hadoop and Spark), Tableau, PowerBI, Streamlit, MS fabric*

Software: *Power Automate, SPSS, Jamovi, Netlogo, Microsoft Office Suite, GSuite, InkScape, Camtasia*

Libraries: *Pandas, NumPy, Scikit-Learn, matplotlib, seaborn, pytorch, NLTK, Scipy, ggplot2, dplyr, ggplot2, huggingface, altair*

Certifications: *Red Cross Emergency First Aid AED+CPR certified*