UBC Science Co-op

Kiersten Lyde-Stad

Combined Major in Computer Science and Statistics, 4th Year

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TECHNICAL SKILLS

Programming Languages:	Python, R, SQL, Java, C++, C, TypeScript, LaTeX
Data Science & ML:	scikit-learn, pandas, NumPy, Matplotlib, Jupyter, MATLAB
Web Development:	JavaScript, Node.js, HTML, CSS, Streamlit
Tools & Platforms:	GitHub, Excel, SQL Workbench, Cloudflare, Workday
Testing & Development:	JUnit, JSON, Mocha, Chai
Environments:	VS Code, IntelliJ IDEA, Overleaf

TECHNICAL WORK EXPERIENCE

Indigenous Procurement Administrator Co-op | UBC Finance — Jan–Aug 2024
- Led data collection and analysis for UBC's Supply Chain Act report on labour risks
- Created SOPs and business plans to guide procurement and sustainability efforts
- Analyzed Workday Report and Excel spend data to support UBC sustainability initiatives
- Developed processes for identifying sustainable companies via web scraping and certification checks
  Technologies: SQL, Excel, Workday, Qualtrics, MS Office

TECHNICAL PROJECTS

Indigenous Business Directory | UBC Finance — Jan–Aug 2024
- Development, optimization, and maintenance of Excel business directory
- Migrated Excel directory to SQL, improving scalability and data security
- Automated supplier data collection with Qualtrics surveys, reducing manual entry
  Technologies: SQL, Excel, Qualtrics

SympFlaura: Symptoms & Flareup Tracker | Machine Learning — May 2025–Present
- Developed ML model with scikit-learn to predict chronic illness flareups from user symptom inputs
- Deployed as a secure Streamlit app with authentication, improving accessibility and persistence
  Technologies: Python, Streamlit Authenticator, scikit-learn | **GitHub:** github.com/klydestad/SympFlaura

Portfolio Website | Web Development — Jun 2024–Present
- Developed a personal portfolio website to showcase projects and skills
- Optimized interface for usability and aesthetics, showcasing technical work effectively
  Technologies: HTML, CSS, JavaScript, VS Code | **GitHub:** github.com/klydestad/kierstenly-project

Pool Chemistry Logbook | Software Construction — Dec 2023
- Developed a Java tool to digitally track pool chemistry with exception alerts and data persistence
- Designed an intuitive UI to simplify monitoring and historical review of chemical levels
  Technologies: Java, JUnit, JSON, IntelliJ IDEA | **GitHub:** github.com/klydestad/pool-chem-logbook

Pool Chemistry Diagnostic Tool | Data Analysis — Jun 2023
- Created Python functions to evaluate chlorine levels and recommend dosage adjustments
- Proposed adoption to replace manual logging, reducing human error in pool maintenance
  Technologies: Python, Jupyter, GitHub | **GitHub:** github.com/klydestad/pool-chem

Vehicle Theft Rates Analysis | Statistical Inference — Apr 2023
- Performed hypothesis testing and bootstrap confidence intervals on theft data in R
- Summarized results in a final report highlighting significant theft trends
  Technologies: R, Jupyter, GitHub | **GitHub:** github.com/klydestad/vehicle-theft-rates

Heart Disease Symptom Analysis I Data Science   Dec 2022
- Built regression model linking symptoms with age, validating results with statistical tests
- Led collaborative workflow with GitHub, streamlining team contributions
  Technologies: R, Jupyter, GitHub I **GitHub:** github.com/klydestad/heart-disease-vs-age

Resonant Frequency vs. Temperature Analysis I Data Science, Physics   Jan–Mar 2022
- Analyzed trumpet frequency data with Excel and SpectrumLab to assess the impact of heat
- Identified statistically significant results, contributing to physics coursework research
  Technologies: Excel, SpectrumLab I **GitHub:** github.com/klydestad/frequency-vs-temp

WORK EXPERIENCE

Swim Instructor/Lifeguard I North Vancouver Recreation & Culture   Sep 2019–Present
- Collected and analyzed pool chemistry data, ensuring compliance with safety standards
- Balanced pool chemical levels in coordination with coworkers to maintain safe swim conditions
- Tracked swim skills and scheduled lessons using Excel and PerfectMIND software
  Technologies: Excel, PerfectMIND

VOLUNTEER EXPERIENCE

Science Conference Moderator & Participant I UBC   Mar 2022
- Moderated sessions and presented findings at UBC's science conference

Flute and Ensemble Lessons I Community & Private   Sep 2016–Present
- Tutored flute students, led ensemble clinics, and conducted junior bands

Junior Summer Camp Counselor I BC SPCA   Aug 2016–Aug 2017
- Educated children on animal welfare at BC SPCA summer camp

EDUCATION

B.Sc. Combined Major in Computer Science and Statistics, 4th Year   Expected Graduation 2026
University of British Columbia, Vancouver, BC

CERTIFICATIONS

Standard First Aid & CPR/AED C   Jun 2025
Workplace Hazardous Materials Information System Training   Feb 2024
National Lifeguard Pool Option   Jul 2023
WHMIS for Workers   May 2023
WorkSafe BC Workplace Safety   Feb 2019