Kiersten Lyde-Stad

3rd Year Combined Major in Computer Science and Statistics

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<https://www.kierstenly.dev/>

**TECHNICAL SKILLS**

**Languages:** Java, R, Python, SQL, JavaScript, LaTeX

**Tools/Frameworks:** GitHub, JUnit, JSON, Jupyter, MATLAB, Excel

**Web:** HTML, CSS

**Environments:** VS Code, IntelliJ IDEA, SQL Workbench

**TECHNICAL PROJECTS**

**Indigenous Business Directory** | **SQL, Data Analysis** Jan – Aug 2024

* Development, optimization, and maintenance of Excel business directory
* Migration of directory to SQL, enhancing data security and scalability
* Streamlined supplier information gathering process via Qualtrics surveys

**Pool Chemistry Logbook** | **Java, JUnit, JSON, UI Design** Dec 2023

* Developed a Java-based digital tool for managing pool chemistry, featuring data logging, analysis, and alerting functionalities via exception throwing
* Implemented data persistence using JSON for saving and loading logbooks
* Designed an intuitive UI for monitoring current and historical readings

**Pool Chemistry Diagnostic Tool** | Python, Jupyter, GitHub Jun 2023

* Analyzed pool chlorine data via constructing functions to indicate whether a level is in range, its difference from the ideal range, and the quantity of chemicals required to correct it
* Proposing program to local pool as a replacement for manual recording and calculations

**Vehicle Theft Rates Analysis** | R, Statistical Inference, Jupyter Apr 2023

* Performed statistical analysis on vehicle theft data using R, including two-sample z-tests and bootstrap confidence intervals
* Constructed a final analysis based on hypothesis testing results

**Heart Disease Symptom Analysis** | R, Data Science, Jupyter, GitHub Dec 2022

* Designed and validated a multiple linear regression model to explore relationships between heart disease symptoms and age
* Managed a group project using GitHub for version control and collaboration

**Resonant Frequency vs. Temperature Analysis** | Data Science, Excel Jan - Mar 2022

* Explored the relationship between increased temperature and frequency of a trumpet
* Analyzed frequency spectrum data with Excel and found statistically significant results

**WORK EXPERIENCE**

**Indigenous Procurement Administrator Co-op** | UBC Finance Jan – Aug 2024

* Led data collection and analysis for UBC's Canadian Supply Chain Act report, assessing supply chain risks of forced/child labor
* Conducted and analyzed Workday Report and Excel spend data to reach Indigenous spending goals, identify procurement opportunities, and track KPIs
* Development and documentation of standard operating procedures and business plans for various projects

**Swim Instructor/Lifeguard** | North Vancouver Recreation & Culture Sep 2019 – Present

* Collect and analyze pool chemistry data, communicating with coworkers to adjust pool chemistry
* Utilize Excel and PerfectMIND software for swim skills tracking and lessons scheduling

**VOLUNTEER EXPERIENCE**

**Science One Mentor**| UBC Sep 2022 – Present

* Providing guidance to first-year students in UBC’s accelerated Science One program

**Non-Commissioned Officer** | St. John Ambulance First Aid Sep 2016 – 2022

* Teaching and evaluating emergency first aid skills to children ages 5-15

**Science Conference Moderator & Participant** | UBC Science One Mar 2022

* Presented research findings and facilitated discussions in two-day scientific conference

**Flute and Ensemble Lessons** | Community & Private Sep 2016 – Present

* Tutoring, leading ensemble clinics, and conducting junior concert bands

**EDUCATION**

**3rd Year Bachelor of Science, Computer Science and Statistics** Expected graduation May 2026

University of British Columbia, Vancouver, BC

**CERTIFICATIONS**

* National Lifeguard Pool Option (Recertification) Jul 2023
* Standard First Aid and CPR-C-AED (Recertification) Sep 2024
* WHMIS for Workers May 2023