



## Kiersten Lyde-Stad

Combined Major in Computer Science and Statistics, 4<sup>th</sup> Year

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### TECHNICAL SKILLS

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<b>Languages:</b>	Java, Python, C, C++, R, SQL, Bash, LaTeX
<b>Libraries:</b>	JSON, JUnit, NumPy, Matplotlib, Pandas
<b>Tools/Frameworks:</b>	GitHub, Cloudflare, Jupyter, MATLAB, Excel, Workday
<b>Web:</b>	JavaScript, HTML, CSS
<b>Environments:</b>	VS Code, IntelliJ IDEA, SQL Workbench, Overleaf

### TECHNICAL WORK EXPERIENCE

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

- Led data collection and analysis for UBC's Canadian Supply Chain Act report, assessing potential risks of forced/child labour
- Developed processes for identifying sustainable companies through web scraping and certification cross-referencing
- Created standard operating procedures and business plans to guide procurement and sustainability efforts
- Analyzed Workday Report and Excel spend data to support UBC's sustainability initiatives

**Technologies:** SQL, Excel, Workday, Qualtrics, MS Office

### TECHNICAL PROJECTS

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#### Indigenous Business Directory | UBC Finance 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

**Technologies:** SQL, Excel, Qualtrics

#### Portfolio Website | Web Development Jun 2024 - Present

- Developed a personal portfolio website to showcase projects and skills
- Utilized HTML, CSS, and JavaScript to create a responsive and visually appealing design

**Technologies:** HTML, CSS, JavaScript, VS Code

#### Pool Chemistry Logbook | Software Construction 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 for saving and loading logbooks
- Designed an intuitive UI for monitoring current and historical readings

**Technologies:** Java, JUnit, JSON, IntelliJ IDEA

#### Pool Chemistry Diagnostic Tool | Data Analysis 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

**Technologies:** Python, Jupyter, GitHub

#### Vehicle Theft Rates Analysis | Statistical Inference 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

**Technologies:** R, Jupyter, GitHub



## Heart Disease Symptom Analysis | Data Science

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

**Technologies:** R, Jupyter, GitHub

## Resonant Frequency vs. Temperature Analysis | Data Science, Physics

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

**Technologies:** Excel, SpectrumLab

## WORK EXPERIENCE

### 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

**Technologies:** Excel, PerfectMind

## VOLUNTEER EXPERIENCE

### Science Conference Moderator & Participant | UBC

Mar 2022

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

### Flute and Ensemble Lessons | Community & Private

Sep 2016 - Present

Tutored, led ensemble clinics, and conducted junior concert bands.

### Junior Summer Camp Counselor | BC SPCA

Aug 2016 - Aug 2017

Educated children aged 5-12 about animal welfare, including responsible pet care and the importance of adopting rescue animals.

## EDUCATION

### B.Sc. Combined Major in Computer Science and Statistics, 3<sup>rd</sup> Year

Expected graduation May 2026

University of British Columbia, Vancouver, BC

## CERTIFICATIONS

### Workplace Hazardous Materials Information System Training

Feb 2024

### National Lifeguard Pool Option

Jul 2023

### Standard First Aid & CPR/AED C

Jun 2023

### WHMIS for Workers

May 2023

### WorkSafe BC Workplace Safety

Feb 2019