

# Sadie Lee

Email: [leesadie025@gmail.com](mailto:leesadie025@gmail.com) | LinkedIn: [@leesadie](#) | Github: [@leesadie](#) | Portfolio: [leesadie.vercel.app](https://leesadie.vercel.app)

## EDUCATION

### University of British Columbia

Vancouver, BC, CA

*Bachelor of Arts in Cognitive Systems; Minor in Data Science*

2022 – 2026

**Coursework:** Statistical Inference, Databases in Data Science, Applied Machine Learning, Programming and Algorithms, Symbolic Logic, Designing Cognitive Systems, Cognitive Neuroscience, Differential Calculus

## EXPERIENCE

### Undergraduate Intern - Mayo Clinic Platform

Summer 2024

*Mayo Clinic*

- Built a 3D classification model and 3D segmentation model with MR prostate DICOM images to develop and test an end-to-end imaging workflow – PyTorch, TorchIO, torchvision, Nibabel, Pydicom, Sklearn, Linux OS
- Wrote queries in SQL to identify data cohorts for potential customers
- Created customer acquisition dashboards with Power BI and DAX
- Developed technical documentation and process guides
- Parsed clinical notes to extract patient diagnoses using pre-trained LLMs and Regex

### Research Assistant

May 2023 – April 2024

*BC Children's Hospital Research Institute / UBC Faculty of Medicine*

- Implemented scripts to automate collection and analysis for time in range data – R, tidyverse
- Led focus groups to gain user feedback on new mobile application features for a study investigating the effects of peer-led mental health support for adults with type 1 diabetes
- Wrote a manuscript detailing the co-design and development process of the mobile application

### Software Developer

Summer 2023

*UBC Emerging Media Lab (EMLx)*

- Designed and implemented a web app for self-guided forest bathing – TypeScript, React, Node.js, MongoDB
- Integrated the Mapbox API for location-based augmented reality in Unity and Needle Engine

### Deep Learning Researcher

March – Dec. 2023

*UBC Multifaceted Innovations in Neurotechnology*

- Classified brain tumor MR images with CNNs – PyTorch
- Conducted literature reviews to explore interaction between humans and reinforcement learning agents

## RESEARCH

### Topological Data Analysis and Interpretability of 3D-Convolutional Neural Networks

*Accepted by 2024 AAAI Undergraduate Consortium*

### Formalizing Ethical Design in Prostate Cancer Image Analysis: A Preliminary Case Study

*Accepted by 2024 IEEE MIT Undergraduate Research Technology Conference*

## TECHNICAL SKILLS

**Languages:** Python, R, SQL, C#, Javascript, Typescript, LaTeX, HTML, DAX

**Technologies & Environments:** Git, Jupyter, Unity, Power BI, MongoDB, React, Next.js, Node.js, Oracle, Windows, Linux

**Libraries:** pandas, numpy, Matplotlib, PyTorch, torchvision, NiBabel, Pydicom, Sklearn, NetworkX, tidyverse, D3.js

## LEADERSHIP AND VOLUNTEERING

### VP External, Ballet Teacher

Sept. 2023 – Present

*UBC Ballet*

- Coordinating the production of events, handling logistics and external communication, and managing budgets
- Teaching weekly intermediate-advanced ballet classes to university students

### Data Science Consultant

Jan. 2023 – Apr. 2023

*180 Degrees Consulting*

- Designed and implemented a dashboard in Power BI using KPIs to evaluate impact for a non-profit organization
- Conducted market research by designing and distributing a questionnaire