# Sadie Lee

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#### **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, Informatics

#### 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 gueries in SQL to identify cohorts for potential Accelerate imaging customers
- · Created external and internal-facing dashboards with Power BI and DAX for market intelligence and utilization
- · Developed technical documentation and process guides
- Parsed clinical notes to extract diagnoses using 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 app features for a study investigating the effects of digital peer 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, REDCap, Windows, Linux **Libraries**: pandas, numpy, Matplotlib, PyTorch, torchvision, NiBabel, Pydicom, Sklearn, NetworkX, tidyverse, D3.js

#### LEADERSHIP AND VOLUNTEERING

#### **Vice President: Ballet Teacher**

Sept. 2023 - Present

**UBC Ballet Club** 

- · Coordinating the production of events, handling logistics, and managing event 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 and competitive analysis