# 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 for Data Science, Databases in Data Science, Applied Machine Learning, Symbolic Logic, Designing Cognitive Systems, Informatics, Visualization for Data Science, Cognitive Neuroscience

#### **EXPERIENCE**

# **Undergraduate Intern - Mayo Clinic Platform**

Summer 2024

Mayo Clinic

- Built a 3D classification model and 3D segmentation model with MR prostate images to develop and test an
  end-to-end imaging workflow on the Discover platform with various NVIDIA GPUs PyTorch, TorchIO, torchvision,
  Nibabel, Pydicom, Sklearn, Linux OS
- · Wrote queries 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 program utilization metrics
- Developed technical documentation and process guides on the end-to-end imaging workflow and dashboards
- · Parsed clinical notes to extract diagnoses with Regex functions

Research Assistant May 2023 – April 2024

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

- Wrote scripts to automate collection and analysis for time in range data R, tidyverse
- Communicated with participants to provide technical support and effectively resolve app-related issues
- Facilitated focus groups for a co-design approach to gain user feedback on new app features

Software Developer Summer 2023

UBC Emerging Media Lab (EMLx)

- Developed a web app based on a UBC Faculty of Forestry clinical trial 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, TorchIO, NiBabel, Pydicom, Sklearn, NetworkX, tidyverse

#### LEADERSHIP ACTIVITIES

#### **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
- Designed and developed a website for the club TypeScript, Next.js, Node.js, Tailwind CSS