

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, Statistical Modeling, Databases in Data Science, Cognitive Neuroscience, Symbolic Logic, Designing Cognitive Systems, Foundations of Informatics

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 an end-to-end imaging workflow on the Discover platform - PyTorch, TorchIO, torchvision, Nibabel, Pydicom, Sklearn, Linux OS
- Writing queries in SQL to identify cohorts for potential Accelerate imaging customers
- Creating external and internal-facing dashboards with Power BI and DAX for market intelligence and program utilization metrics
- Writing technical documentation and process guides on the end-to-end imaging workflow and dashboards
- Parsing 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 application to mitigate challenges faced by a 2022 UBC Faculty of Forestry clinical trial studying the health merits of 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, Conda, Docker
- 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; Affiliation: University of British Columbia

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

Submitted to 2024 MIT IEEE URTC

TECHNICAL SKILLS

Languages: Python, R, SQL, C#, Javascript, Typescript, LaTeX, HTML, Power BI 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