# Carter Blair

Portfolio | github.com/cartgr | linkedin.com/in/carter-blair | 403-505-3880

## **EDUCATION**

## University of Victoria

Victoria, BC

B.Sc. Computer Science and Psychology, Minor in Philosophy

Expected August 2022

- Awarded NSERC USRA Grant, Summer 2021
- CSC 482A, Machine Learning Theory Grade: 96%
- CSC 370, Database Systems Grade: 99%
- CSC 421, Intro to AI Grade: 88%
- ECE 403, Optimization for Machine Learning Grade: 87%

## Coursera

Deep Learning Specialization

Expected July 2022

• Completed Courses: Neural Networks and Deep Learning

#### Coursera

Machine Learning Engineering for Production (MLOps) Specialization

• Completed Courses: Intro to Machine Learning in Production

Expected June 2022

## EXPERIENCE

# Teaching Assistant, Python Programming

September 2021 – December 2021

University of Victoria

Victoria, BC

- Taught four 2-hour lab sessions per week and graded midterm and final exams.
- Accompanied Dr. Celina Berg in lectures to aid in answering student questions.

# Teaching Assistant, Java Programming

September 2020 – December 2020

University of Victoria

 $Victoria,\ BC$ 

• Co-lead three 2-hour lab sessions per week and graded assignments and exams.

# Research Assistant

September 2020 – December 2020

Applied and Theoretical Neuroscience Lab, University of Victoria

Victoria, BC

- Built software to remove artefacts from MUSE EEG data using ICA, from the ground up.
- Refined data handling processes.

# COMMUNITY & LEADERSHIP

President

September 2019 – April 2020

UVic Neuro-Tech Club

 $Victoria,\ BC$ 

• Built a system to play Mario Kart using an EEG.

President

September 2018 – December 2019

UVic Surf Club

 $Victoria,\ BC$ 

• Organized monthly, 50-person trips to Tofino-to surf!

# PROJECTS

Online Positive and Unlabeled Learning | PyTorch, scikit-learn, SciPy, pandas

September 2021 – Present

- Designed and implemented two algorithms for learning from positive and unlabeled data (PU-learning). The first can be used for online PU-learning. The second algorithm can be used for batch mode PU-learning and achieves state-of-the-art performance on Gaussian data.
- Supervised by Dr. Nishant Mehta and Dr. George Tzanetakis

The Effect of Colour in Affective Data Visualization | Hypothesis Testing, R

May 2021 – Present

- Currently working on a manuscript regarding the influence of colour on the interpretation of data.
- Funded by the NSERC USRA grant and supervised by Dr. Charles Perin.

## TECHNICAL SKILLS

Languages: Python, R, C++, CUDA, SQL, Java, C, MATLAB, JavaScript, LaTeX

Developer Tools: Git, VS Code, Atom, Jupyter

Libraries: PyTorch, Scikit-Learn, SciPy, NumPy, Pandas, NLTK, Matplotlib, seaborn, D3.js

Applications: Excel