

CONTACT	Email: vivwhite@cs.ubc.ca Website: vivianwhite.github.io LinkedIn: linkedin.com/in/vivian-white
RESEARCH INTERESTS	I am passionate about furthering our scientific understanding of black-box deep networks to develop robust, reliable, and general models. Specifically, I study computer vision and test-time adaptation.
PUBLICATIONS	<ol style="list-style-type: none">3. V White, M Chaudhary, G Wolf, G Lajoie, KD Harris. Learning Stochastic Rainbow Networks. NeurIPS Workshop on Scientific Methods for Understanding Deep Learning, 2024.2. V White, A White, J Wild, T Nguyen, F Huang. Human Error Scenario Analysis of Software Defects. ISSRE Workshop on Human Factors for Software Dependability, 2024.1. V White, M Chaudhary, G Wolf, G Lajoie, KD Harris. Learning and Aligning Structured Random Feature Networks. ICLR Workshop on Representational Alignment, 2024.
EDUCATION	<p>The University of British Columbia (UBC), Vancouver, British Columbia, CA.</p> <ul style="list-style-type: none">· Ph.D., Computer Science, expected 2030 <p>Western Washington University (WWU), Bellingham, Washington, USA.</p> <ul style="list-style-type: none">· M.S., Computer Science, June 2025, GPA 4.00/4.00· B.S., Computer Science, June 2024, GPA 3.78/4.00<ul style="list-style-type: none">· Minors in Mathematics and Honors Interdisciplinary Studies
GRANTS AND AWARDS	<p>Graduate</p> <ul style="list-style-type: none">· CS Merit Scholarship, UBC, 2025· Outstanding Graduate in CS, WWU, 2025· Dean J. Alan Ross Travel Fund Award, WWU, 2024· CS Graduate Fellowship, WWU, 2024· Graduate Recruitment Tuition Waiver, WWU, 2024 <p>Undergraduate</p> <ul style="list-style-type: none">· Outstanding Undergraduate in CS, WWU, 2024· 1st-place for CS poster presentation, Emerging Researchers National (ERN) Conference, 2024· Barbara Ellen Maguire-Veith Family Scholarship, WWU, 2023· Fellow, International Network for Bio-Inspired Computing (IN-BIC), 2023· Lars and Elaine Giusti Scholarship for CS, WWU, 2022· CS/Math Distinguished Scholar Award, WWU, 2020-2023· Western Foundation Distinguished Scholar Award, WWU, 2020· Merit Scholarship, WWU, 2020· Admissions Achievement Award, WWU, 2020· Admissions Annual Scholarship, WWU, 2020· Scholarship Award, WSECU, 2020
EXPERIENCE	<p>Graduate Research Assistant, UBC and Vector Institute for AI, Sept 2025–present</p> <ul style="list-style-type: none">· Studying learning and adaptation for computer vision with Dr. Evan Shelhamer <p>Masters Intern, Pacific Northwest National Laboratory (PNNL), June–Aug 2025</p> <ul style="list-style-type: none">· Worked on Math for AI Assurance with Dr. Henry Kvinge· Fine-tuned a base LLM using Group Relative Policy Optimization for statistical weight analysis <p>Graduate Teaching Assistant, WWU, Dec 2024–June 2025</p> <ul style="list-style-type: none">· Taught weekly labs and graded for an introductory data science class· Graded for a graduate analysis of algorithms class <p>Graduate Research Assistant, WWU, June 2024–June 2025</p> <ul style="list-style-type: none">· Developed stochastic rainbow networks with Drs. Kameron Harris, Guy Wolf, and Guillaume Lajoie <p>Undergraduate Research Assistant, WWU, June 2022–June 2024</p> <ul style="list-style-type: none">· Developed randomized scattering convolutional networks and learnable structured random features with Drs. Kameron Harris, Guy Wolf, and Guillaume Lajoie

Research Intern, Mila - the Quebec AI Institute, Montréal, QC, July–Sept 2023

- Co-advised by Drs. Guy Wolf and Guillaume Lajoie studying learnable structured random features
- Funded by IN-BIC fellowship grant through National Science Foundation (NSF) AccelNet program

Undergraduate Research Assistant, WWU, April 2021–March 2022

- Worked with Dr. Scott Wehrwein on project applying machine learning techniques to international border legibility tasks for computer vision

RESEARCH TALKS *What Changed? Interpreting Model Updates During Training and Test-Time Adaptation*

- Canadian Celebration of Women in Computing, Vancouver, BC, Nov 2025

Analysis of LLM Weights During RL Reasoning Finetuning

- Gold Intern Symposium, PNNL, virtual, Aug 2025

Learning Stochastic Rainbow Networks

- Graduate Research Symposium, WWU, Bellingham, WA, June 2025
- ERN Conference, Atlanta, GA, Mar 2025

Learning and Aligning Structured Random Feature Networks

- NeuroAI Workshop, University of Oregon, Eugene, OR, Aug 2024

Unveiling the Cognitive Roots: Human Error Scenario Analysis of Software Defects

- Senior Project Symposium, WWU, Bellingham, WA, May 2024

POSTER
PRESENTATIONS *What Changed? Interpreting Model Updates During Training and Test-Time Adaptation*

- ACM Celebration of Cascadia Women in Computing, Vancouver, BC, Oct 2025

Learning Stochastic Rainbow Networks

- NeurIPS Workshop on the Science of Deep Learning, Vancouver, Canada, Dec 2024

Learning and Aligning Structured Random Feature Networks

- CoNectome Symposium, University of Washington, Seattle, WA, May 2024
- ICLR Workshop on Representational Alignment, Vienna, Austria, May 2024
- ERN Conference, Washington DC, Mar 2024

Randomized Scattering Convolutional Networks

- DeepMath Conference, Johns Hopkins University, Baltimore, MD, Nov 2023
- NeuroAI Workshop, Mila, Montréal, QC, Oct 2023
- NSF S-STEM Scholars Meeting, Washington DC, Sept 2023
- NeuroAI Workshop, University of Washington, Seattle, WA, Sept 2022

TECHNICAL SKILLS Languages: Python (PyTorch, HuggingFace, numpy, pandas, scikit-learn), Java, C, Javascript

Systems: Bash, Linux, L^AT_EX, git, HPC cluster environments, AWS

REFERENCES **Evan Shelhamer**
Assistant Professor, Department of Computer Science, The University of British Columbia
CIFAR AI Chair, Vector Institute for AI
shelhamer@cs.ubc.ca

Henry Kvinge
Affiliate Assistant Professor, Department of Mathematics, University of Washington
Data Scientist, Pacific Northwest National Laboratory
hjk3@uw.edu

Guillaume Lajoie
Associate Professor, Department of Mathematics and Statistics, Université de Montréal
Core Academic Member and CIFAR AI Chair, Mila - Quebec AI Institute
guillaume.lajoie@mila.quebec

Kameron Decker Harris
Associate Professor, Department of Computer Science, Western Washington University
kameron.harris@wwu.edu