Vivian White (she/her) — Curriculum Vitae — Updated: September 15, 2025

Contact

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Research Interests

I am a machine learning researcher interested in collaborative and interdisciplinary approaches to deepen our scientific understanding of black-box neural networks.

Publications

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

University of British Columbia, Vancouver, British Columbia, CA.
· Ph.D., Computer Science, expected 2029

Western Washington University, Bellingham, Washington, USA.
· M.S., Computer Science, June 2025, GPA **4.00/4.00**
· B.S., Computer Science, June 2024, GPA **3.78/4.00**
  · Minors in Mathematics and Honors Interdisciplinary Studies

Grants and Awards

Graduate
· CS Merit Scholarship, UBC, 2025
· Outstanding Graduate in Computer Science, WWU, 2025
· Dean J. Alan Ross Travel Fund Award, WWU, 2024
· CS Graduate Fellowship, WWU, 2024
· Graduate Recruitment Tuition Waiver, WWU, 2024

Undergraduate
· Outstanding Undergraduate in Computer Science, WWU, 2024
· 1st-place award for CS poster presentation, ERN Conference, 2024
· Barbara Ellen Maguire-Veith Family Scholarship, WWU, 2023
· IN-BIC Fellow, 2023
· Lars and Elaine Giusti Scholarship for Computer Science, 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

Graduate Research Assistant, UBC, Sept 2025–present
· Studying learning and adaptation for vision with Dr. Evan Shelhamer

NSIP Masters Intern, PNNL, June–Aug 2025
· Worked in the Math for AI Assurance team with Dr. Henry Kvinge
· Fine-tuned base LLM with GRPO for statistical weight analysis

Graduate Teaching Assistant, WWU, Dec 2024–June 2025
· Taught weekly labs and graded for an introductory data science class
· Graded for a graduate-level analysis of algorithms class

Computational Neuroscience Research Assistant, WWU, June 2022–June 2025
· Advised by Dr. Kameron Decker Harris studying more interpretable models of deep learning
· Developed learnable structured random feature networks and deep stochastic rainbow networks

Research Intern at Mila - the Quebec AI Institute, Montréal, QC, July–Sept 2023
· Advised by Dr. Guy Wolf and Dr. Guillaume Lajoie studying learnable structured random features

· Funded by grant from International Network for Bio-Inspired Computing (IN-BIC) through NSF AccelNet program (2019976)

Computer Vision Research Assistant, WWU, April 2021–March 2022
· Worked with Dr. Scott Wehrwein on international borders project applying machine learning techniques to international border legibility tasks

Research Talks

Analysis of LLM Weights During RL Reasoning Finetuning
· August Intern Symposium, Pacific Northwest National Laboratory, virtual, Aug 2025

Learning Stochastic Rainbow Networks
· Graduate Research Symposium, Western Washington University, Bellingham, WA, June 2025
· NSF Emerging Researchers National (ERN) Conference, Atlanta, GA, Mar 2025
· Mihales Lab, Allen Institute for Brain Science, Seattle, WA, Jan 2025

Learning and Aligning Structured Random Feature Networks
· NeuroAI Workshop, University of Oregon, Eugene, OR, Aug 2024
· Hutchinson ML Research Group, Western Washington University, Bellingham, WA, June 2024

Unveiling the Cognitive Roots: Human Error Scenario Analysis of Software Defects
· Senior Project Symposium, Western Washington University, Bellingham, WA, May 2024

Randomized Scattering Convolutional Networks
· Bonner Lab, Johns Hopkins University, virtual, Sept 2023
· RAFALES Lab, Mila, Montréal, QC, Aug 2023
· Neuro-AI Computations Research Group, Mila, Montréal, QC, Aug 2023

Poster Presentations

Learning and Aligning Structured Random Feature Networks
· CoNectome Symposium, University of Washington, Seattle, WA, May 2024
· Scholars Week, Western Washington University, Bellingham, WA, May 2024
· ICLR Workshop on Representational Alignment, Vienna, Austria, May 2024
· NSF Emerging Researchers National (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
· Scholars Week, Western Washington University, Bellingham, WA, May 2023
· NeuroAI Seattle, University of Washington, Seattle, WA, Sept 2022

Technical Skills

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

Systems: Bash, Linux, LaTeX, git, HPC cluster environments, AWS, HuggingFace

References

Evan Shelhamer
Assistant Professor, Department of Computer Science, The University of British Columbia
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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, Mila
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Kameron Decker Harris
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