

CONTACT	Email: <a href="mailto:whitev4@wwu.edu">whitev4@wwu.edu</a> Website: <a href="https://vivianwhite.github.io">vivianwhite.github.io</a> LinkedIn: <a href="https://linkedin.com/in/vivian-white">linkedin.com/in/vivian-white</a>
RESEARCH INTERESTS	I am a computer scientist with a focus on <b>computational neuroscience</b> and <b>machine learning theory</b> . I am interested in collaborative and interdisciplinary approaches to deepen our understanding of <i>how</i> and <i>why</i> neural networks work.
PUBLICATIONS	<ol style="list-style-type: none"><li>3. <b>V White</b>, M Chaudhary, G Wolf, G Lajoie, KD Harris. Learning Stochastic Rainbow Networks. NeurIPS Workshop on Scientific Methods for Understanding Deep Learning, 2024.</li><li>2. <b>V White</b>, A White, J Wild, T Nguyen, F Huang. Human Error Scenario Analysis of Software Defects. ISSRE Workshop on Human Factors for Software Dependability, 2024.</li><li>1. <b>V White</b>, M Chaudhary, G Wolf, G Lajoie, KD Harris. Learning and Aligning Structured Random Feature Networks. ICLR Workshop on Representational Alignment, 2024.</li></ol>
EDUCATION	<b>Western Washington University</b> , Bellingham, Washington. <ul style="list-style-type: none"><li>· M.S., Computer Science, expected June 2025</li><li>· B.S., Computer Science, June 2024, GPA <b>3.78/4.00</b><ul style="list-style-type: none"><li>· Minors in Mathematics and Honors Interdisciplinary Studies</li></ul></li></ul>
GRANTS AND AWARDS	<p>Graduate</p> <ul style="list-style-type: none"><li>· Dean J. Alan Ross Travel Fund Award, WWU, 2024</li><li>· CS Graduate Fellowship, WWU, 2024</li><li>· Graduate Recruitment Tuition Waiver, WWU, 2024</li></ul> <p>Undergraduate</p> <ul style="list-style-type: none"><li>· Outstanding Undergraduate in Computer Science, WWU, 2024</li><li>· 1st-place award for CS poster presentation, ERN Conference, 2024</li><li>· Barbara Ellen Maguire-Veith Family Scholarship, WWU, 2023</li><li>· IN-BIC Fellow, 2023</li><li>· Lars and Elaine Giusti Scholarship for Computer Science, WWU, 2022</li><li>· Computer Science/Math Distinguished Scholar Award, WWU, 2020-2023</li><li>· Western Foundation Distinguished Scholar Award, WWU, 2020</li><li>· Merit Scholarship, WWU, 2020</li><li>· Admissions Achievement Award, WWU, 2020</li><li>· Admissions Annual Scholarship, WWU, 2020</li><li>· Scholarship Award, WSECU, 2020</li></ul>
RESEARCH EXPERIENCE	<p>Computational Neuroscience Research Assistant, WWU, June 2022–present</p> <ul style="list-style-type: none"><li>· Working with Dr. Kameron Decker Harris to study more interpretable models of learning in neural networks trained for vision tasks</li><li>· Presented findings at multiple national and international conferences and workshops</li><li>· Published papers to the 2024 ICLR Workshop on Representational Alignment and NeurIPS Workshop on Scientific Methods for Understanding DL</li></ul> <p>Human Errors in Software Engineering Research Assistant, WWU, Sept 2023–June 2024</p> <ul style="list-style-type: none"><li>· Worked with Dr. Fuqun Huang studying root causes of human errors that lead to defects in programming</li><li>· Analyzed cognitive roots of software defects from six open-source repositories</li><li>· Published paper to the 2024 IEEE Workshop on Human Factors for Software Dependability</li></ul> <p>Research Intern at MILA - Quebec AI Institute, Montréal, QC, July–Sept 2023</p> <ul style="list-style-type: none"><li>· Collaborated with Dr. Guy Wolf and Dr. Guillaume Lajoie during my IN-BIC Fellowship</li><li>· Active member of two graduate research labs</li><li>· Funded by grant from International Network for Bio-Inspired Computing (IN-BIC) through NSF AccelNet program (2019976)</li></ul> <p>Computer Vision Research Assistant, WWU, April 2021–March 2022</p>

- Worked with Dr. Scott Wehrwein on international borders project applying machine learning techniques to international border legibility tasks
- Web scraped satellite images of international borders using Bing Maps API
- Read and discussed computer vision research papers weekly and collaborated effectively on a team

## RESEARCH TALKS

### *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 First 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

Programming languages: Python (PyTorch, numpy, pandas, scikit-learn), Java, C

Computer systems: Linux, L<sup>A</sup>T<sub>E</sub>X, git, cluster environments

## REFERENCES

### **Kameron Decker Harris**

Assistant Professor, Department of Computer Science, Western Washington University  
[kameron.harris@wwu.edu](mailto:kameron.harris@wwu.edu)

### **Guillaume Lajoie**

Associate Professor, Department of Mathematics and Statistics, Université de Montréal  
 Core Academic Member, Mila  
[guillaume.lajoie@mila.quebec](mailto:guillaume.lajoie@mila.quebec)

### **Fuqun Huang**

Assistant Professor, Department of Computer Science, Western Washington University  
[huangf2@wwu.edu](mailto:huangf2@wwu.edu)

### **Filip Jagodzinski**

Chair, Department of Computer Science, Western Washington University  
[filip.jagodzinski@wwu.edu](mailto:filip.jagodzinski@wwu.edu)