

Christian Rogers, Curriculum Vitae, February 2026

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Employment

Researcher (Undergraduate)

Aligned, Robust, and Interactive Autonomy (ARIA) Lab

January 2025 - Present

Salt Lake City, Utah

- Led research in interpretability to trace reward model circuits and their impacts on policy fine tuning, securing \$10.4k in grants, an NSF REU and two University of Utah UROP grants.

Lead Research Engineer (Undergraduate)

Neural Plasticity Rehabilitation and Movement Dynamics Lab

September 2024 - Present

Salt Lake City, Utah

- Directed software engineering for lab tools in a 7 person team of clinicians and programmers
- Published a paper on using deep learning to classify stroke severity as a diagnostic tool. Achieved a classification accuracy of against manual clinical assessments of 97%, with a baseline of 66%.
- Built E-PASS, a production web/app-based digital cognitive screening tool, acting as team lead and software engineer. In clinical testing.

Founder and Chief Scientist, Autonomy

September 2025 - Present

Duran Aerospace

Salt Lake City, Utah

- Founded an autonomous long-distance drone R&D and manufacturing company, designing new proprietary landing-spot planning and detection algorithms. We have received \$5,000 in grants from a venture capital firm, and are drafting an application for a DARPA contract.

Founder

March 2023 - December 2024

R&J Software House

Pleasant View, Utah

- Led backend development and customer relations using ReactJS for a freelance software startup that competed at the National Leadership Conference and won top 3 in Utah.

Founder

December 2022 - December 2025

Webfork

Pleasant View, Utah

- Developed a RAG recommendation algorithm and presented it to the International Career Development Conference and South Valley Shark Tank, winning \$2600 in grants.

Education

Bachelor's in Computer Science and Applied Mathematics

Anticipated, April 2028

University of Utah

Salt Lake City, Utah

- GPA: 3.81 - Engineering, Research, and Grand Challenge Scholar, Lassonde Founder and Student Leader, Merit Scholar
- *Relevant Coursework:* Deep Learning, Mechanistic Interpretability of LLMs, Multimodal LLM Agents, Advanced Artificial Intelligence, Linear Algebra, Multivariable Calculus, Optimization Theory, Systems and Architecture, Data Structures and Algorithms

Associate's in General Studies earned concurrently with High School Diploma

April 2024

Weber State University and Weber High School

Ogden, Utah

- GPA: 3.5 - Utah-Wasatch Sterling Scholar Finalist in Computer Technology, Debate Captain

Technical Skills

- **Languages and Frameworks:** Python, Numpy, Pytorch, TransformerLens, C++, Java
- **Applications:** MATLAB, Unity

Academic Publications

J. Ukey, **C. Rogers**, et al. “Enhancing Stroke Recovery Assessment: A Machine Learning Approach to Real-World Hand Function Analysis” International Journal of Medical Informatics, Vol 204, 2025

Technical Projects

Interpretability of Embodied VLAs and Cross-Modal Circuit Tracing	January 2026 - Present
● Worked to develop the theory and experimental results for tracing causal circuits across multiple ML model types in a pipeline. In Progress.	
Towards Causal Benchmarks for LLM Hallucination	January 2026 - Present
● Used an approach based on ConeCUT to build a benchmark that identifies and ranks the tendency of models to hallucinate based on internal circuit structures. In Progress.	
Interpretability-Auditing for RAG LLMs in high-regulation contexts	October 2025 - Present
● Using Sparse Autoencoder and Transcoders, performed circuit tracing and reduction to explain provenance, chain of thought, and internal reasoning of RAG LLM assistants for finance. In Progress.	
Convolutional Neural Network from Scratch in C++, 92% MNIST Accuracy	Aug 2024
● Built a neural network from scratch including the numerical and autodiff in C++, achieving a 92% accuracy on the MNIST.	
1-Night Esoteric Programming Language	Oct 18, 2024
● Built a language called etisoppO, which is an inverted version of C with inverted operators as a 1 night project competing against a classmate.	
Open Source Digital Circuit Design Teaching Program and Simulator	November 2025 - December 2025
● Called CircuitCat, built to teach the basics of digital circuit design through ALU design and computer organization through mini lessons taught by a cat mascot, as well as a simulator sandbox.	
Open Source Pixel Art and Animation Editor	October - November 2025
● Called Piskari, built as a minimal open source pixel art animation editor for a class project	
Networked Online Multiplayer Video Game in C#	March - April 2025
● Online networked version of snake themed after dune's with a live leaderboard for class	