Connor Pennington

connorpennington2004@gmail.com | connorpennington.dev

Education

Clemson University Aug 2022 – Dec 2025
B.S. Computer Science, Artificial Intelligence minor | ***GPA**: 4.00/4.00* *Clemson, SC*

- **Clubs**: AI Club, Latin Dance Club, Book Club, Intramural Ultimate Frisbee, and Clay Club
- **Study Abroad**: Cryptocurrency and Blockchain Experience in Nicosia, Cyprus in Summer 2023.

Technical Skills

Languages: Python, C++, C, SQL, Java, Ruby, JavaScript, C#
Technologies: Git, PyTorch, AI Agents (AWorld, AgentOrchestra, MCP), RAG, NeRF, Linux
Certifications: Simplilearn JavaScript, Postman Student Expert

Experience

NVIDIA Aug 2025 – Present
Student Collaborator *Remote*

- Benchmark agentic workflow frameworks (**AWorld and AgentOrchestra**) on the GAIA dataset, where state of the art models are replaced with a Small Language Model (**SLM**).
- Create a dataset for finetuning the SLM from agent failure patterns, traces, and distilled data focused on Metropolis use cases, such as public safety, warehouses, and traffic.
- **Finetune** and evaluate the model, measuring against the baseline out-of-the-box SLM.

Sixfold AI Jun 2025 – Aug 2025
Engineering Intern *New York, NY*

- Improved the PDF data extraction pipeline in **Python**, increasing system accuracy by **8%**.
- Integrated an open-source LLM chat interface with a Model Context Protocol (**MCP**) gateway and multiple servers, enabling workflow automation that saved employees **10+ hours** weekly.
- Collaborated closely across teams of different roles to define success metrics and applied LLM evaluation methods (pairwise comparisons and accuracy) to validate and refine automation.

OpenAI Aug 2024 – Dec 2024
Student Collaborator *Remote*

- Built a prompt suite to test and guide the moral reasoning capabilities of LLMs.
- Implemented a system where a less advanced model generates complex moral scenarios for a more advanced model to analyze and respond to based on the moral implications presented.
- Designed evaluations to analyze moral learning effectiveness across 3 different model gaps.

402 Software Engineering Group Jun 2024 – Aug 2024
Software Engineer Intern *Macon, GA*

- Utilized a machine learning model to extract tables from over 600 uniquely formatted PDFs.
- Engineered a **C#** pipeline to convert the extracted tables from CSV to XML files, eliminating manual table processing and boosting development productivity by approximately **20%**.

Projects

Recommendation System Interaction Study | *HATLab* Jan 2025 – Present

- Compose prompts for LLMs to generate inferences and recommendations from participant data.
- Program a pipeline to convert data into Sankey Diagrams of inferences and recommendations.
- Develop a **RAG** system to match LLM recommendations with actual products from Amazon.

Lecture Genie | *CUHackit* Mar 2024

- Invented a website that allows users to upload lecture videos to create study tools and quiz questions.
- Implemented video key frame analysis, enabling information extraction from on-screen content.
- Achieved **1st** place in Use of AI in Education, **1st** in Use of Data/API, and **2nd** in Use of AWS.