

Lily Stone

Computer Engineering Student | Stevens Institute of Technology

 lilyaddy15@icloud.com

 GitHub: <https://github.com/Lilyaddy15>

 LinkedIn: <https://www.linkedin.com/in/lily-stone-6118311b9/>

GitHub & Project Portfolio

 **GitHub Profile:**

<https://github.com/Lilyaddy15>

I build systems across machine learning, software engineering, and hardware-based design. My work focuses on applying technical concepts to real-world problems, with an emphasis on performance, scalability, and thoughtful system design.

Featured Projects

1. NeuroStudy Coach (Deep Learning / PyTorch / Full-Stack Python App)

 <https://github.com/Lilyaddy15/NeuroStudy-Coach-Final>

- Built an AI-powered study planning application that generates personalized, day-by-day study schedules for neurodivergent students, combining a PyTorch neural network with a Streamlit web interface
- Designed and trained a 3-layer feed-forward neural network (128/64/32 neurons, batch normalization, dropout, ~12K parameters) to predict task completion time from 11 student and assignment features, achieving a 75% reduction in prediction error over baseline heuristics

- Generated and preprocessed a 2,000-session training dataset, tuned the model over ~90 training epochs, and validated performance against rule-based baselines using held-out data
 - Architected the application in modular layers — scheduling engine, database models, UI components, and retrieval — and integrated the Anthropic API to power an in-app AI study assistant
 - Prioritized privacy by keeping all user data local, with no cloud storage of personal study information
-

2. Cloud Analysis (Machine Learning / Data Analysis)

 https://github.com/Lilyaddy15/cloud_analysis

- Developed a machine learning pipeline for analyzing cloud imagery data
 - Implemented preprocessing and feature extraction techniques for image-based datasets
 - Evaluated model performance using cross-validation and accuracy metrics
 - Explored trade-offs between model complexity and generalization
-

3. FPGA Galaga Game (Embedded Systems / Digital Design)

 <https://github.com/Lilyaddy15/CPE487GalagaProject>

- Designed and implemented a fully functional arcade-style Galaga game on FPGA hardware
- Built game logic using finite state machines and real-time input handling
- Integrated display output and timing constraints on a hardware platform
- Debugged and optimized performance under strict hardware limitations

4. Movie Recommendation System (Python / Web Scraping / Recommendation Logic)

 <https://github.com/Lilyaddy15/Course-Project>

- Built a Python-based movie recommendation system that scrapes movie data from IMDb, including title, year, genre, rating, and popularity.
- Implemented the recommendation system class and recommendation logic to generate personalized movie suggestions based on user preferences.
- Designed the workflow to scrape data, display results in a DataFrame, visualize ratings, and recommend movies based on configurable filters.

Technical Skills

- **Languages:** Python, JavaScript, VHDL, SQL
- **Tools & Technologies:** PyTorch, scikit-learn, pandas, NumPy, Streamlit, OpenCV, Git, Anthropic API, machine learning workflows, FPGA toolchains
- **Areas of Interest:** AI/ML, backend systems, real-time systems, human-centered technology

What Drives Me

I'm especially interested in building AI-powered systems that solve real-world problems and improve how people interact with technology. I enjoy working in fast-paced environments where I can take ownership, learn quickly, and contribute to impactful products.