Taehoon (Ethan) Lee

(657) 239-5851 | ethan.lee@emory.edu | taehoonlee.dev | linkedin.com/in/taehoon-ethan-lee | github.com/ethn1ee

Education

Emory University

Aug 2023 - May 2026

Atlanta, GA

Computer Science (BS), Psychology (BA)

- GPA: 4.0
- Awards: James T Laney Scholarship (Fall 2024, Spring 2025), Deans List (all semesters)
- Relevant coursework: Data Structures & Algorithms, Computer Architecture, Algorithm Analysis, Machine Learning, Database Systems, Linear Algebra, Discrete Structures

Experience

Software Engineering Intern

Jan 2025 – Present

UrsaTech

Remote

- Spearheaded the integration of 3D game environment and autonomous driving simulation into interactive educational web applications built with JavaScript/TypeScript, React.js, and Next.js
- Built and maintained server-side logic and REST APIs using Node. js and Express. js, ensuring efficient data retrieval and integration
- · Leveraged AWS Amplify, Auth0, and AI SDK to implement user authentication and multimodal AI capabilities

Machine Learning Research Intern

Jun 2024 - Present

National Science Foundation

Atlanta, GA

- Developed a benchmark to evaluate 8 visual explanation methods for deep learning models, leveraging **PyTorch**, **Torchvision**, and **OpenCV** to assess interpretability, faithfulness, and stability across various computer vision architectures
- Designed and deployed a scalable visual explanation pipeline for data preprocessing, explanation generation, and method evaluation, utilizing **Python** and **Gradio** to enhance usability and streamline experimentation
- Contributed to peer-reviewed research published on arXiv and co-organized an AAAI workshop on foundation models and LLMs in biological research, facilitating discussions on cutting-edge advancements and applications

Data Science Research Assistant

Nov 2023 - Present

Emory University CAV Lab

Atlanta, GA

- Contributed to a 60-person crowdsourced study under Dr. Emily Wall, identifying barriers to data engagement in music streaming and contrasting the behaviors of self-trackers and casual users through statistical analysis employing **Python**, **Pandas**, and **SciPy**
- Developed an interactive data visualization tool using HTML and JavaScript, enabling dynamic exploration of streaming history
- Submitted co-authored research paper to 3 global conferences: CSCW 2024, CHI 2025, IMWUT 2025

Software Engineering Intern

Jun 2024 - Dec 2024

eStreamly

Atlanta, GA

- Rebuilt 17 online shopping interfaces with **TypeScript** and **AngularJS** for optimal user experience, improving conversion rate by 11%
- Developed and maintained a **C**# and **.NET** application, leveraging **Azure DevOps** pipelines for CI/CD automation, ensuring seamless testing, builds, and deployments across multiple environments
- Collaborated in a **SCRUM-based Agile team** of 3 developers, actively contributing to weekly sprints, prioritizing rigorous testing, and maintaining clear communication with stakeholders to deliver high-quality software solutions

Projects

Personal Portfolio Website

Dec 2024 - Jan 2025

- Developed a full stack portfolio website using Next.js and TypeScript to showcase projects, research, and professional experience
- Built a REST API to access projects data stored and managed in a PostgreSQL database, ensuring seamless backend communication

Emory Hacks: Inaugural Software Hackathon at Emory

Sep 2024 – Jan 2025

- Co-founded Emory's hackathon group, leading the technology team alongside multidisciplinary teams of ambitious students, attracting 100+ participants and sponsorships from JPMorgan, Hyundai, and WolframAlpha
- Spearheaded hackathon website creation using React.js and JavaScript, featuring animations built with Framer Motion and GSAP

Technical Skills

Languages: Python, JavaScript, TypeScript, Java, C/C++, C#, Go, SQL, NoSQL, PostgreSQL, Swift, HTML, CSS/SCSS, Tailwind CSS, Bash, R, Markdown, LaTeX, ARM Assembly

Web Frameworks: Next.js, React, SwiftUI, AngularJS, Gradio, Spring Boot, Flask, .NET

Developer Tools: VS Code, XCode, Jupyter, Firebase, MongoDB, Postman, Linux/Unix, Figma, Node.js, Express.js, Git, HTTP, REST API, AWS, Microsoft Azure

Libraries: PyTorch, Torchvision, OpenCV, TensorFlow, Pandas, NumPy, SciPy, jQuery, D3.js