

TAEHOON (ETHAN) LEE

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EDUCATION

Emory University

Bachelor of Science in Computer Science

Atlanta, GA

Aug 2023 – May 2026

- **Honors:** 3.99 / 4.0 GPA, 4x James T Laney Scholarship, 3x Dean's List
- **Courses:** Data Structures & Algorithms, Computer Architecture, Algorithm Analysis, Machine Learning, Cybersecurity, Database Systems, Data Mining, Deep Learning, Human-Computer Interaction, Linear Algebra, Discrete Structures

PROJECTS

Kubernetes Homelab

Jul 2025 – Present

- Managing a personal **Kubernetes** cluster on a Raspberry Pi, implementing a highly available microservices architecture
- Deployed 10+ services including **PostgreSQL**, **Prometheus**, **Redis**, and **Hashicorp Vault** using **Helm** charts and custom manifests
- Developed a central **gRPC** backend server with **Go** to proxy all inter-service communication, enhancing security and type-safety
- Utilized **NGINX Ingress Controller** for traffic management and **Cloudflare Tunnel** for secure remote access to the cluster
- Achieved complete **CI/CD** pipeline via **GitHub Action** and **ArgoCD**, automating deployment of services from GitHub to the cluster
- Built taehoonlee.cloud with **Next.js**, the project homepage featuring custom observability dashboard and documentation page

Emory Hacks: Emory University's Student-Run Hackathon

Sep 2024 – Present

- Co-founded and led the technology department, developing annual hackathon websites (emoryhacks.com) with **Next.js**
- Created a unique database solution leveraging Google Spreadsheet with Google API, allowing non-technical team members to easily access and manage applicant data while addressing race conditions and data integrity
- Secured 100+ participants and sponsorships from major firms including JPMorgan, Hyundai, and WolframAlpha

WORK EXPERIENCE

Cloud Platform Engineering Intern

UKG

Atlanta, GA

May 2025 – Aug 2025

- Implemented a **Kubernetes** CronJob for TLS certificate expiry check, providing significant observability during certificate renewal
- Developed a **REST API** to aggregate real-time status of on-prem MongoDB, MySQL, and RabbitMQ services across 4 distinct datacenters, using cloud-native technologies such as **Go**, **Docker**, **OpenTelemetry**, **Cloud Foundry BOSH**, and **OpenStack**
- Enhanced system observability through **Grafana** synthetic monitoring and provisioned monitoring probes with **Terraform**
- Applied CI/CD and GitOps practice using **ArgoCD**, **Helm**, and **GitHub Actions** to fully automate container release and deployment

Software Engineering Intern

UrsaTech

Atlanta, GA

Dec 2024 – Feb 2025

- Engineered a coding education web app, integrating 3D games and a personalized LLM tutor using **Next.js** and **Express.js**
- Utilized a diverse stack of 30+ widely-used **Javascript/Typescript** libraries, including **AWS Amplify**, **Auth0**, **AI SDK**, and **MUI**

Software Engineering Intern

eStreamly

Atlanta, GA

Jun 2024 – Aug 2024

- Maintained a full-stack video streaming-based shopping platform, leveraging **Angular** for frontend and **.NET** for backend
- Performed a significant redesign and accessibility enhancement of the UI to expand target audience and improve conversion rate
- Collaborated in an **Agile** team of developers, contributing to weekly sprints and QA testing for robust and efficient feature delivery

Data Science Research Assistant

Emory University CAV Lab

Atlanta, GA

Nov 2023 – Present

- Co-authored a personal informatics study under Dr. Emily Wall, studying data engagement of music streaming service users
- Aggregated 100+ GB of streaming history data from 60 Spotify users using **Python** for comprehensive statistical analysis
- Created interactive web data visualizations using **jQuery** and **d3.js**, enabling dynamic exploration of streaming history

SKILLS

- **Languages:** Go, JavaScript/TypeScript, Java, Python, C, Rust, SQL, HTML, CSS, Bash/Zsh, Nushell, Ruby, Typst, C#, Lua, Vim
- **Cloud-Native Technologies:** Kubernetes, Docker, Helm, Linux, gRPC, Prometheus, Grafana, OpenTelemetry, NGINX, OpenStack
- **Web Development:** React, Next.js, Tailwind CSS, Node.js, NPM, Django, Angular, Express.js, Spring Boot, Gradio, .NET
- **Data Science & Machine Learning:** Pandas, NumPy, Scikit-Learn, PyTorch, SciPy, Gradio, OpenCV, Torchvision, Gradio
- **Tools:** Git, AWS, GCP, Redis, PostgreSQL, MySQL, MongoDB