

ETHAN (TAEHOON) 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 with event-driven server-side spreadsheet update
- Secured 200+ participants and sponsorships of \$10K+ from major firms including JPMorgan, Hyundai, WolframAlpha, and O'Reilly

Curaitor: AI-powered Coursework Manager

Sep 2025 – Sep 2025

- Built an intelligent coursework management tool for college students as part of HackGT 12, leveraging Gemini API, Go, and Next.js.
- Implemented robust concurrency with multiple Gemini clients as goroutines, managing race conditions with context and mutex.

Emorylife: Korean Community Hub at Emory

Jul 2025 – Sep 2025

- Built an online community (emorylife.net) for Korean parents of Emory University to share academic resources, events, and advice
- Developed the full-stack web application using Next.js, TypeScript, tRPC, and PostgreSQL, featuring internationalization and SSR

WORK EXPERIENCE

Cloud Platform Engineering Intern

Atlanta, GA

UKG

May 2025 – Aug 2025

- Implemented a Kubernetes CronJob for TLS certificate expiry check, providing significant observability during certificate renewal
- Developed an internal 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 private monitoring probes with Terraform
- Applied CI/CD and GitOps practice using ArgoCD, Helm, and GitHub Actions to fully automate container release and deployment
- Practiced Agile methodologies, participating in daily standups and bi-weekly sprint planning to ensure timely delivery of features

Software Engineering Intern

Atlanta, GA

eStreamly

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

Atlanta, GA

Emory University CAV Lab

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, HCL
- **Cloud-Native Technologies:** Kubernetes, Docker, Helm, Linux, Terraform, gRPC, Prometheus, OpenTelemetry, NGINX, OpenStack
- **Web Development:** React, Next.js, Tailwind CSS, Svelte, Node.js, Django, Angular, Express.js, Spring Boot, Gradio, .NET
- **Data Science & Machine Learning:** Pandas, NumPy, Scikit-Learn, PyTorch, SciPy, Gradio, OpenCV, Torchvision, Gradio
- **Tools:** Git, Vim, Helix, AWS (S3, Lambda, Cloudfront), GCP (Cloud Run, AlloyDB, Gemini), Redis, SQLite, PostgreSQL, MongoDB