ETHAN (TAEHOON) LEE

ethantlee21@gmail.com · taehoonlee.dev · linkedin.com/in/ethantlee · github.com/ethn1ee

EDUCATION

Emory University — **Atlanta, GA**
Bachelor of Science in Computer Science — Aug 2023 – May 2026
- **Honors**: 3.99 / 4.0 GPA, 4x James T Laney Scholarship, 3x Dean's List
- **Courses**: Data Structures & Algorithmns, 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 technolgy department, developing annual hackathon websites (emoryhacks.com) with Next.js and React
- 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 OReilly

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