# ETHAN (TAEHOON) LEE

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#### **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 <u>taehoonlee.cloud</u> with Next.js, the project homepage featuring custom observability dashboard and documentation page

# Emory Hacks: Emory University's Student-Run Hackathon

Sep 2024 – Presen

- Co-founded and led the technolgy 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 100+ participants and sponsorships from major firms including JPMorgan, Hyundai, and WolframAlpha

### **Emorylife: Korean Community Hub at Emory**

Jul 2025 - Present

- 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

- $\bullet \ \ Implemented\ a\ Kubernetes\ CronJob\ for\ TLS\ certificate\ expiry\ check,\ providing\ significant\ observability\ during\ certificate\ renewal$
- 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
- $\bullet \ \ \text{Co-authored a personal informatics study under Dr. Emily Wall, studying data engagement of music streaming service users}$
- 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, Terraform, gRPC, Prometheus, 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