

# ETHAN (TAEHOON) LEE

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## EDUCATION

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### Emory University

Atlanta, GA

*Bachelor of Science in Computer Science*

Expected May 2026

- **Honors:** 3.99 GPA, 6x James T Laney Scholarship, 4x Dean's List

- **Courses:** Computer Architecture, Algorithm Analysis, Machine Learning, Cryptography, Database Systems, Deep Learning

## WORK EXPERIENCE

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### Software Engineering Intern (Cloud Infrastructure)

Atlanta, GA

UKG

May 2025 – Aug 2025

- Developed an internal REST API in Go to aggregate real-time network health of on-premise MongoDB, MySQL, and RabbitMQ VMs across 4 distinct datacenters, using Docker, OpenTelemetry, Prometheus, BOSH, and OpenStack
- Deployed a Kubernetes CronJob for monitoring TLS certificate expiry to provide observability during certificate renewal
- Provisioned synthetic testing probes with Terraform and deployed Grafana BlackBox exporters to enhance observability
- Applied CI/CD and GitOps principle using ArgoCD and GitHub Actions to fully automate container build and deployment

### Software Engineering Intern

Atlanta, GA

eStreamly

Jun 2024 – Aug 2024

- Improved user interface of a full-stack video streaming-based shopping platform, leveraging TypeScript, Angular, and .NET
- Managed Docker image release pipelines using GCP Cloud Build and provisioned Cloud SQL and AlloyDB instances
- Collaborated in an Agile team of developers, contributing to weekly sprints and QA testing for efficient feature delivery

### Software Engineering Intern

Atlanta, GA

UrsaTech

Jan 2024 – Apr 2024

- Developed a gamified coding education web app, integrating 3D games and a LLM chatbots into the frontend using Next.js
- Utilized a diverse stack of 30+ widely-used TypeScript libraries, including AWS Amplify, Auth0, Express.js, AI SDK, and MUI

### Research Assistant

Atlanta, GA

Emory University CAV Lab

Nov 2023 – Sep 2025

- Aggregated 100+ GB of streaming history data from 60 Spotify users using Python for comprehensive statistical analysis
- Created interactive web data visualizations using React and d3.js, enabling dynamic exploration of music streaming history

## PROJECTS

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### Overburrow: Kubernetes Homelab

overburrow.org

- Architected a bare-metal K3s cluster on ARM64 hardware, utilizing Ansible for idempotent node provisioning and OS-level kernel tuning (e.g., checksum offloading disablement) to ensure stability on Raspberry Pi NICs
- Engineered a hybrid networking mesh combining Cilium CNI with Tailscale as the underlay transport and solved complex MTU fragmentation issues by implementing custom packet clamping rules to bypass standard VXLAN encapsulation
- Implemented a full GitOps workflow with ArgoCD and GitHub Actions, enabling declarative and automated deployments

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

emoryhacks.com

- Led the technology department as a co-founder and developed annual hackathon website using Next.js, and TypeScript
- Secured 200+ participants and sponsorships of \$20K+ from major firms including JPMorgan, Hyundai, and WolframAlpha

### Curaitor: AI-powered Coursework Manager

devpost.com/software/curaitor-7epmv2

- Developed an AI coursework management agent for college students during HackGT 12, leveraging Next.js and Go
- Implemented an event-driven architecture using the Actor Model, while managing race conditions with channel and mutex

## SKILLS

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- **Languages:** Go, JavaScript, TypeScript, Java, Python, C, Rust, SQL, HTML, CSS, Bash, Nushell, Typst, LaTeX
- **Cloud-Native Technologies:** Kubernetes, Docker, Helm, Terraform, Ansible, Prometheus, OpenTelemetry, Grafana
- **Tools:** Linux, Git, AWS (S3, Lambda, Cloudfront), GCP (Cloud Run, AlloyDB, Pub/Sub, Vertex AI), Redis, SQLite, PostgreSQL