ETHAN (TAEHOON) LEE

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EDUCATION

Carnegie Mellon University **Pittsburgh, PA**
Master of Software Engineering (4.0/4.0 GPA) Dec 2028
• **Courses**: Distributed Systems, Operating Systems, Cloud Computing, System Design

Emory University **Atlanta, GA**
BS in Computer Science (3.99/4.0 GPA, Magna Cum Laude, 5x Dean's List) May 2026
• **Courses**: Data Structures & Algorithms, Computer Architecture, Databases, Object-oriented Programming

WORK EXPERIENCE

Software Engineering Intern **Fremont, CA**
Tesla Jan 2027 – May 2027
• Incoming intern in the platform team, building scalable observability pipelines for Kubernetes fleets

Founding Software Engineer **Atlanta, GA**
Huddle Surety Sep 2025 – Jan 2027
• Built an AI platform replacing manual surety bond processing at 10x speed, running 100+ bonds daily across 5 agencies
• Designed and developed the core Go REST API spanning 100+ endpoints with Redis caching and Temporal orchestration
• Engineered Python LLM retrieval (RAG) pipelines with cross-document context, generating bond forms at 95% accuracy
• Shipped a role-based web frontend delivering distinct surety agent and contractor UX in React, Next.js, and TypeScript
• Architected end-to-end distributed tracing with OpenTelemetry, enabling per-client usage metrics and cost analysis

Software Engineering Intern **Atlanta, GA**
UKG May 2025 – Aug 2025
• Automated infrastructure operations in a hybrid cloud environment spanning 4 on-prem datacenters and 3 GCP regions
• Built a TLS certificate lifecycle monitor in Go, packaged as a Helm chart and scheduled as a Kubernetes CronJob, replacing manual healthchecks of 200+ Linux VMs and cutting annual certificate renewal time by 50%
• Partnered with Grafana Labs engineers to build database synthetic monitoring using Grafana K6 and Blackbox Exporters

Software Engineering Intern **Atlanta, GA**
eStreamly Jun 2024 – Aug 2024
• Cut redundant API calls by 40% with client-side caching and reactive state store in livestream shopping platform video UI
• Created a multi-stage Docker build and CI/CD release pipeline on GCP Cloud Build, improving deployment speed by 35%

PROJECTS

Kubernetes Homelab & Contribution | *Kubernetes, Linux, Operating System, CI/CD* headlamp.thdxg.dev
• Operated a Kubernetes cluster on 2 Raspberry Pi Linux nodes, serving 20+ projects including personal website
• Automated GitOps CI/CD and provisioned public ingress using Cilium container networking interface and Gateway API
• Contributed upstream to Kubernetes as a SIG Docs member, authoring Korean documentation on scheduling and eviction

Macterm: Terminal Emulator with Persistent Multiplexing | *Swift, SwiftUI, C* macterm.thdxg.dev
• Led development of an open-source macOS terminal emulator with 20 global contributors and 10K+ downloads
• Implemented session persistence, declarative layout, fuzzy command palette, password manager, and extension system

DooleyOnline: Emory Student Marketplace | *Go, Next.js, React, TypeScript, PostgreSQL, AWS* github.com/dooleyonline
• Launched a campus marketplace of 150+ users with a Go, PostgreSQL backend and Next.js, TypeScript, React frontend
• Implemented real-time buyer-seller chat over WebSockets with persisted message history and S3-backed image uploads

SKILLS

• **Languages**: Go, Python, TypeScript, Java, C, JavaScript, Rust, SQL, Swift, x86 Assembly
• **Technologies**: Kubernetes, Docker, Linux, AWS, GCP, PostgreSQL, Redis, Git, Helm, OpenTelemetry, Prometheus, Grafana