KEVIN KWAN

kevinkwan@gatech.edu ▪ Atlanta, GA ▪ kevinkwan.tech ▪ linkedin.com/in/kevinkwan3/ ▪ github.com/Kevin-Kwan

Software Engineer with hands-on experience building and operating secure, scalable, cloud-native systems in high-availability production environments. Strong background in distributed systems, AWS serverless architectures, and CI/CD. Proven ability to support mission-critical customer platforms, participate in on-call rotations, collaborate with engineers on system design, and continuously improve resiliency, security, and performance.

EDUCATION:

Georgia Institute of Technology – Atlanta, GA August 2021 – May 2024

- Bachelor of Science in Computer Science; *summa cum laude* GPA: 3.9
- Zell Miller Scholarship, Graduated with Highest Honors, Dean's List, Faculty Honors

TECHNICAL SKILLS and KNOWLEDGE:

Languages: Java, Python, JavaScript, TypeScript, SQL, Lua, C
Cloud & Backend: AWS (Lambda, Connect, Lex, DynamoDB), Azure, Google Cloud, Serverless Architectures, REST APIs
Security: AES 256 Encryption, Secure API Design, PII Protection
DevOps & Tooling: Git, Version Control Systems, Terraform, CI/CD Pipelines, GitHub, Azure DevOps, Docker
Databases: DynamoDB, MongoDB, MySQL
Frontend: React, Next.js, HTML, CSS
Practices: Agile/Scrum, SDLC, Application Resiliency, Production Support

WORK EXPERIENCE:

Software Engineer I (L3): *GEICO* – Atlanta, GA (Remote) July 2024 – Present

- Played a key role in migrating GEICO's enterprise **Interactive Voice Response (IVR)** platform from **Cisco Unified Communications (UCCE)** to **Amazon Connect**, modernizing legacy infrastructure into a resilient, cloud-native AWS solution
- Developed **Java-based traffic redirection logic** during migration to gradually shift a controlled percentage of live caller traffic from Cisco and Microsoft Nuance IVR to AWS, ensuring stability and minimizing customer impact
- Designed and implemented **AWS Lambda functions and Amazon Lex bots** using JavaScript codehooks to connect internal APIs with customer-facing Amazon Connect contact flows
- Built and maintained **Terraform-based infrastructure pipelines**, enabling secure, repeatable, and scalable deployments
- Delivered customer self-service payment workflows handling **hundreds of thousands of inbound calls daily across the U.S.**, achieving **~60% containment** and reducing transfers and call agent workload
- Implemented secure internal APIs exposing sensitive customer data (DOB, email, policy details) using **AES encryption** to protect PII and payment information such as credit card and bank data
- Developed an **asynchronous, high-throughput Lambda orchestration system** backed by **DynamoDB** queues to process **tens of thousands of concurrent requests**, improving system and application resiliency when internal services were slow or unavailable
- Led development of the **Proof of Coverage** IVR solution, enabling customers to request insurance cards and binders with **80% call containment**
- Participated extensively in **on-call and production support rotations**, including release validation, live IVR testing, and **NOC outage response**, executing rollbacks, restoring services, and contributing to post-incident prevention efforts
- Collaborated closely with **senior and senior staff engineers** to review designs, propose architectural improvements, and communicate technical tradeoffs with cross-functional engineering, business, and leadership teams

Software Engineer Intern: *Publicis Sapient (Publicis Groupe)* – Atlanta, GA June 2023 – August 2023

- Engineered AI-powered conversational chatbot applications having Memory and Agent Tools using **Google VertexAI's LLM, LangChain, MongoDB** and various APIs for the Travel & Hospitality Industry to enhance and assist the user experience for tourists through engaging conversation by providing accurate up-to-date answers to inquiries, live data, and recommendations for Atlanta's attractions, hotels, and restaurants
- Architected and deployed **RESTful APIs** using **Flask** and **Python** that allowed the frontend team to interact with our backend MongoDB databases and AI chatbot program endpoint to generate and retrieve responses
- Improved the accuracy of the bot's responses up to **91%** through rigorous testing and validation