Richard Sheridan Appen

richardsappen@gmail.com richardappen.com

EDUCATION:

University of California San Diego - La Jolla, CA (2018 - 2021):

Bachelor of Science, Computer Science — Major GPA: 4.00

205 Quarter Credits — Overall GPA: 3.92

10 A+'s out of 15 Upper Division Computer Science & Engineering courses — Graduated *Magna Cum Laude*

COMPUTER SKILLS:

Languages: C, C++, Python, Kotlin, Java, Verilog, System Verilog, Swift, MATLAB, Haskell, TypeScript, JavaScript, HTML, CSS, Bash, LaTeX. **Assembly:** ARM, RISCV, MIPS. **Database:** SQLite, MySQL, JDBC.
AWS: CDK, API Gateway, Lambda, DynamoDB, Step Functions, S3, SNS, SES, CloudFront, Route53, CloudWatch, Cognito, IAM, SQS Queue, ElastiCache, DocumentDB, MSK, EKS, EC2, CodeBuild, CodePipeline.
Frameworks/Tools: Kafka, Redis, Kubernetes, Angular, React, Ember.js, Terragrunt, Terraform, Quartus, ModelSim, vi/vim, Eclipse, Visual Studio, IntelliJ, QT Creator, GODOT, make, JUnit, Ant, Git, GDB, Valgrind, XCode, Android Studio, Firebase, Vivado, TravisCI, Ktor.

EMPLOYMENT & EXPERIENCES:

Amazon Software Development Engineer II (November 2024 - Present): Amazon, San Diego, CA

As a Software Development Engineer II in Advertising, I lead multiple projects with cross-team scope. I work with engineers outside my team and organization to achieve high-level leadership goals. Most of my time is spent designing or reviewing other engineers' designs. I also serve as a bar-raiser reviewer for operational and incident postmortem documents in my organization. I currently mentor two entry-level engineers within my team. In 2025 I delivered two high-impact projects that reduced the cost of existing components and increased the scalability of our services.
Tools: Java, AWS Cloud Tools & Services, Kafka, Internal Amazon Tools, LLM Tooling, & GenAI-Assisted workflows

Senior Software Engineer at VivoSense (May 2023 - November 2024): VivoSense, San Diego, CA

As a Senior Full Stack Software Engineer, I mentored and led our junior engineers in implementing and optimizing our microservice-based, cloud application. My contributions included leading design reviews, implementing new features & microservices, working with other tech & science teams on requirements, and being the Scrum Master. I delivered a complete revamp of our authorization service for our MVP, and later led the development of the Data Platform which handles all incoming data from clinical trials with security, efficiency, and availability in mind.
Tools: TypeScript & Angular, AWS Cloud Tools & Services, Kotlin, Ktor, Kubernetes, Kafka, Redis

Amazon Software Development Engineer I (February 2022 - May 2023): Amazon, Seattle, WA

My team managed a heavy traffic, internal tool used to calculate cross-border eligibility for all items in the Amazon catalog. I helped modernize and expand the reach of our product to include more internal teams within Amazon, as well as introduce new features. My responsibilities included creating design documents, participating in design reviews for cross-team projects, performing code reviews, resolving tickets as a part of the on-call rotation, implementing designs using internal tools, languages & cloud resources, and resolving complex problems on a distributed system.
Tools: Java, AWS Cloud Tools & Services, TypeScript, React & Multiple Internal Amazon Tools

Amazon Software Development Engineer Intern (Summer 2021): Amazon, Seattle, WA

Worked in an agile environment on a team of 10 engineers. I created design documents, did code reviews, and attended all team/sprint meetings. My project was to create a new service that automates a request and approval process my team had to do manually. My deliverables were integrated into the team's main product.
Tools: AWS - CDK, API Gateway, Lambda, DynamoDB, IAM, SNS, SQS Queue, S3 - Java, TypeScript & React

PROJECTS:

Requestr (Winter 2022): Created an entire request and approval ticket service that is serverless, leveraging the power of AWS Services. The site is fully functional and live at www.requestr.org and built from an engineering perspective. You can find the design document and more on my personal page for the project.
Frontend: *TypeScript & React* *Backend:* *AWS - CDK, API Gateway, Lambda, DynamoDB, Step Functions, S3, SNS, SES, CloudFront, Route53, CloudWatch, Cognito, IAM* Website Link

Heep (Summer 2020): Co-founder and Co-Developer of *Heep*, a peer-to-peer encrypted social network and platform designed for data security. Intended to address data misuse by contemporary social networks. Includes fully functional social media aspects of adding friends, posting images, reacting to friends' images, etc...
Frontend: *Written in Swift using Xcode* *Backend:* *Python* Website Link

Covid Code (Fall 2020): Software Development Lead of *Covid Code*. Users take a daily survey to determine how likely it is that they have Covid-19. Scan QR codes to see others' risk level or display your own code. Add friends to instantly see their risk level or use the heat map to see all people in the world that are "High Risk" in our system
Frontend: *Written in Swift using Xcode* *Backend:* *Python* Website Link