

PROFESSIONAL SUMMARY:

- 8+ years of experience in **Full Stack Application Development** and applications development with **MEAN Stack and AWS Cloud**.
- Experience deploying Applications, working with **MySQL, PostgreSQL** and **Mongo DB** connections.
- Experience developing Full stack Applications involving technologies such as **Angular, React, Vue, and Node** for server side and working with AWS services. Also, I contributed to designing technical solutions and responsible for documenting the project delivery artifacts like Unit Test cases and results.
- Involved in creating new UI components using Angular, new endpoints using Node, coding standards, and reusable components by reducing the duplication of code, DRY, and better readability by adding proper comments during development.
- Developed new **Lambda** functions and integrated with **API Gateway, S3, SNS, SQS, DynamoDB** and other cloud services using proper structuring for DynamoDB. Additionally, enhanced the existing lambda functions and **batch jobs** to improve the performance of applications.
- Involved in writing automated unit test cases for both APIs and UI using **Jest, Mocha, Chai, Jasmine, Karma and Postman** to maintain code coverage of 80%. Added pipeline tasks to run test coverage and publish the code coverage report in pipelines for all repositories.
- Developed lambdas as replacement for existing API endpoints that often timed out to improve the performance and avoid future timeout which helped by enhancing the application and reducing performance issues.
- Created new **libraries** for common functions and common logics and use it as a package in all other APIs which helps in avoiding the repetition of logics and easy to maintain at one place.
- Upgraded the services by managing the versions of the AWS services which helps in keeping the product active reducing the risk of using outdated services and packages and implement role-based access to update and upload any data.
- Increased the **performance improvement** of the application by optimizing the code and removing obsolete functionality contributing to code clean up and develop common libraries to be used across the application.
- Enhance the application by addressing the accessibility defects and implement **security** standards based on the roles of the user and restrict the unauthorized users from accessing the submission groups by adding the role-based logics in respective Node APIs.
- Upgrade Node versions in all APIs and this involves updating the NPM packages. Update the quarantined or obsolete packages along with peer dependencies. Create new code pipelines, as well as, modify **pipeline** and **release** builds tasks to update node version.
- Involved in writing View **Queries** and **stored Procedures** for returning data to UI Summary pages of all modules. Also, modify the existing views by adding indexes for each table using joins to reduce the wait time helping in the improved performance of database query executions.
- Implemented security standards using **authentication** and **authorization** libraries and adding entitlements checks for all API endpoints, thereby, reducing the number of penetration defects across the application.
- Involved in keeping a track of new development-related tools, frameworks, methods and architectures.
- Created build and release pipelines to automate the build process from lower environment to production environment using Azure DevOps tool. Triggered auto deployment for lower environments and create release branches for higher environments adhering to the Engineering Goals.
- Performed **Code review** to ensure the **coding standards** and best practices are implemented. Follow branching standards and clean stale branches when pull requests are approved and merged to parent branch.
- Experience in all stages of software development cycle with software methodologies like **TDD, SSDLC, and Agile** to include having rich experience in handling the project requirements, implementation, and support.
- Effective communicator with ability to **multi-task** organizational responsibilities and capitalize on skills to complete projects within set deadlines and budget.
- Excellent communication, analytical, interpersonal, problem solving and presentation skills.

TECHNICAL SKILLS:

- **Programming Languages/Framework:** Node JS, Angular 2+, Javascript, Typescript, HTML, CSS, Web Services (REST), Swagger Tool, Nest JS, Express.
- **Databases:** Mongo DB, MYSQL
- **Cloud:** AWS (Lambda, Batch, SQS, SNS, Dynamo DB, CloudWatch, ECS)
- **Tools:** Visual Studio.
- **Methodologies:** Waterfall, Agile.
- **DevOps:** Azure DevOps.
- **Source Control:** Git, SVN.
- **Operating Systems:** Windows, macOS, Linux

EDUCATION:

Bachelor of Computer Engineering with emphasis in Embedded System Design, University of North Texas, Denton Teas.

PROFESSIONAL EXPERIENCE:

Cognizant 2019 - 2025 | Principal Engineer

Project – Blue Modernization

Clients: BCBSA

Tools Stack: Python, Node JS, TypeScript, My SQL, PostgreSQL Swagger, GIT, Azure DevOps, AWS Cloud

Project Description: Selected to design and implement a robust solution for real-time change tracking within a centralized database used across multiple operational plans. The primary objective was to securely store these data changes in object storage. Subsequently, leveraged AWS Glue ETL jobs to seamlessly partition and transform the data into structured CSV logs, tailored to each respective plan's requirements. This approach mirrored the principles applied in similar projects like ZOCCAM, albeit with a focus on egressing data changes securely to the respective plans for consumption via a secure FTP connection.

Roles and Responsibilities

- Implemented a robust CI/CD pipeline via Jenkins, integrated AWS CodePipeline and SAM to automate the deployment of CloudFormation stacks across multiple development stage accounts..
- Developed Infrastructure as Code (IaC) scripts to enable continuous deployment of a cloud stack, capturing changes to an Aurora PostgreSQL database in CSV format. Utilized Glue ETL and Lambda functions for data transformation and encryption.
- Created Python scripts for Glue ETL and Lambda, employing PyTest and Poetry for streamlined dependency management.
- Coordinating with development team by assigning tasks and ensuring smooth progress in development and testing, to deliver quality code in the stipulated timelines. Mentor the development team and provide technical guidance.
- Enhanced team collaboration through Microsoft Teams while promoting rigorous code review practices in GIT before deploying changes.
- Responsible for documenting the project delivery artifacts like Unit Test cases and results.
- Triaging defects and include them in the planning process to balance new work and maintenance. Prioritizing the defects and discuss defect difficulty and explain the risk involved because of that. Updating the defect resolution.
- Configure and update build pipelines and releases in Azure Dev Ops. Manage and trigger build and deployments in lower environments. Contribute to Agile best practices.

Project –Design Assist

Client: Trane Technologies.

Tools Stack: Node JS, TypeScript, Angular, My SQL, Swagger, GIT, Azure DevOps, AWS Cloud.

Project Description: Chosen for my extensive expertise in front-end development with Vue, React, and Angular frameworks to lead a team in creating a graphing application for designing Air Conditioning Systems. Became a GoJs expert to accelerate development, resulting in a successful release within 3 months. Provided critical AWS support to address performance issues. Utilized RxJs and NgRx extensively in the application, which was written in the latest Angular framework with TypeScript. Also, provided guidance to junior developers in writing better maintainable & reusable components.

Role and Responsibilities:

- Contributed to the development of the Self-Serve UI and API Application. Involved in all phases of the application development from requirement analysis, design, development, implementation, and testing of the application. Create web- based applications using Angular, Node JS, Nest JS. Develop, deploy and debug cloud-based applications using AWS such as Lambdas, batch jobs and/ writing code for serverless applications. Created scripts and modified existing stored procedures to handle business functionality. Documenting the application flows and technical flows to keep a track of existing process and features.
- Involved in requirements analysis, sprint planning, grooming of the stories.
- Involved in designing technical solution, coding, unit testing and fixing defects and supporting through SIT and UAT and implementation of the project.
- Coordinating with development team by assigning tasks and ensuring smooth progress in development and testing, to deliver quality code in the stipulated timelines. Mentor the development team and provide technical guidance.
- Implementing solution using Node Js, Angular, Mocha and Jasmine for unit testing framework.
- Configure and update build pipelines and releases in Azure Dev Ops. Manage and trigger build and deployments in lower environments. Contribute to Agile best practices.
- Responsible for documenting the project delivery artifacts like Unit Test cases and results.
- Triaging defects and include them in the planning process to balance new work and maintenance. Prioritizing the defects and discuss defect difficulty and explain the risk involved because of that defect. Updating the defect resolution.
- Participate in grooming, estimations, retrospectives, discuss and collaborate on features.
- Identified and addressed performance bottlenecks in the application caused by RxJs implementations and overuse of NgRx (like redux).
- Storybook Framework for component reference.
- Led the development of critical features using GoJs to support customer design needs.

Project – Apple TV Content Management System

Clients: Apple

Tools Stack: Node JS, TypeScript, Angular, My SQL, Swagger, GIT, AWS Cloud Rest API, GraphQL, Java, Spring, Python, Pulumi, Cloud Development Kit, Cloud formation, EKS, ECS, MSK, SonarQube, Jenkins, CICD

Project Description: In my capacity as a Cloud Engineering/Full Stack Lead at Apple, my primary responsibility was to architect the marketing platform that serves as the nexus between marketers and talent. I spearheaded a team of five engineers, collaborating closely with Apple's MARCOM team to meet their client-side requirements. Utilized VueJs for the client-side development and harnessed Node.js for server-side web applications. In the initial stages, I expedited the deployment of AWS infrastructure through CloudFormation. Subsequently, I transitioned our approach to leverage AWS CDK in Python, enabling the entire team to contribute effectively. Beyond this role, I undertook the crucial task of architecting the migration of other applications from legacy systems to AWS and GCP for the IS&T team.

Roles and Responsibilities

- Participated in grooming, estimations, retrospectives, discuss and collaborate on features.
- Gathering technical requirements and analyzing feasibility from clients.
- Involve in communicating with client to get clarifications.
- Involved in preparation of Traceability Matrix.
- Involved in planning and design of authorization access matrix.
- Involved in preparation of Unit Tests using Mocha, Chai.
- Developing API's in Nodejs.
- Developed the UI with authorization maintained.
- Deployment of applications on different environments.
- Involved in designing technical solution, coding, unit testing and fixing defects and supporting through SIT and UAT and implementation of the project.
- Implementing solution using Node Js, Angular, Mocha and Jasmine for unit testing framework.
- Developed a social-network-style platform enabling 200 Apple marketers to access and share media related to 15,000 prospective talents and contractors.
- Implemented a robust video streaming platform that allows seamless media uploads in various formats, prioritizing high-quality video playback even on limited bandwidth.
- Successfully migrated five full applications from Apple's legacy systems to the AWS cloud, including a Ruby on Rails application that involved modernizing authentication with an OAuth-based system.
- Architected cloud infrastructure solutions utilized by engineers across multiple teams, supporting the needs of nearly 10 team to include EKS and ECS as well as MSK.

Dell Data Guardian 2019 | Staff Engineer

Tool Stack: STAF Automation, Objective C, Swift, C, C++, Container Orchestration, Virtualization, Python, Grafana

Roles and Responsibilities

- **Developed and maintained Dell Data Guardian clients for macOS System Extensions and native iOS secure-viewer**, adding on-device encryption, rights enforcement, and real-time policy sync with the cloud entitlement service.
- **Participated in sprint grooming, estimation, and retrospectives**, collaborating with product and UX to refine Apple-platform data-protection features and ensure parity with Windows/Android agents.
- **Engineered low-level interception hooks** (Endpoint Security, FileProvider, CryptoKit) to apply EDRM controls across Finder, iWork, and Microsoft Office workflows, authoring detailed traceability and authorization-matrix documentation.
- **Gathered and analyzed enterprise customer requirements**, translating compliance mandates (HIPAA, GDPR) into macOS/iOS user stories and feasible technical designs.
- **Architected and led a STAF-driven automation framework in Python**, creating reusable libraries that run smoke, regression, and performance suites on distributed Mac mini labs and iOS simulators via Jenkins CI.
- **Mentored a cross-functional team of engineers and SDETs**, conducting code reviews, threat-model workshops, and pair-programming sessions to uplift secure-coding and automated-testing practices.
- **Instrumented STAF pipelines with custom Python telemetry**, providing real-time test analytics to Grafana dashboards and enhancing visibility into Apple-platform quality trends.

GenMZ 2018 | Principal Engineer

Tool Stack: Unity 3D, C#, React (TypeScript), Node.js, AWS (CloudFront & Lambda), Docker, GitHub Actions CI/CD, Terraform, Python scripting

Roles and Responsibilities

- **Directed full-stack product delivery** for a green-field mobile-and-web platform, defining architecture and hands-on building React front-ends, Node.js/Java Spring Boot services, and AWS infrastructure-as-code pipelines.
- **Guided native app releases**—Swift/Objective-C for iOS and Java/Kotlin for Android—shepherding the team through store approvals and cross-platform feature parity.
- **Championed 3-D and Unity-driven initiatives**, acting as the bridge between gameplay engineers, artists, and backend developers to integrate real-time content into customer-facing experiences.
- **Stood up CI/CD and automated test suites** (GitHub Actions, Jenkins, Python-based STF automation) to enforce coding standards, regression coverage, and secure release gates.
- **Instituted cloud-first DevOps practices**, leveraging Terraform, Docker, and Kubernetes to deliver resilient, scalable, and cost-aware environments.
- **Recruited, mentored, and performance-coached** a distributed team of engineers, cultivating a culture of psychological safety, knowledge sharing, and continuous improvement.
- **Collaborated tightly with founders, designers, and account stakeholders**, translating ambiguous startup concepts into iterative roadmaps and user-validated MVPs while balancing technical debt and delivery risk.
- **Embedded security and privacy by design**, rolling out threat-modeling workshops, secure code reviews, and dependency-management policies to safeguard IP and user data.

ZOCCAM 2017-2018 | Principal Engineer

Tool Stack: Swift, Objective-C, Java/Kotlin (Android), AngularJS, Spring Boot, AWS (EC2, S3, RDS, Lambda, VPC), Docker, Terraform/CloudFormation, Jenkins, GitHub Actions, Python automation scripts, Git

Roles and Responsibilities

- **Drove full-cycle product engineering** for ZOCCAM's mobile check-deposit platform, balancing strategic leadership with hands-on coding across native, web, and backend layers.
- **Delivered native iOS and Android apps**—Swift/Objective-C and Java/Kotlin—owning everything from architecture decisions and secure image capture to App Store / Play release management.
- **Re-architected the cloud stack**, leading a green-field migration from Azure to AWS and standing up VPC-isolated Spring Boot microservices, managed databases, and encrypted object storage via infrastructure-as-code.
- **Modernized server-side services** with the Spring ecosystem, introducing RESTful and event-driven APIs that integrate with multiple banking partners for X9 clearing and secure funds transfer.
- **Built an AngularJS operations portal** so support teams could review, approve, and audit captured checks through an intuitive, role-based UI.
- **Instituted DevSecOps pipelines** (Git, Jenkins/GitHub Actions, Docker, CloudFormation/Terraform) to automate builds, tests, security scans, and zero-downtime deployments.
- **Mentored a cross-functional team** of mobile, backend, and DevOps engineers—facilitating architecture reviews, pairing sessions, and agile ceremonies to foster shared ownership and continuous learning.
- **Collaborated with banking, compliance, and product stakeholders** to translate regulatory requirements (Reg CC, NACHA X9) into resilient technical controls, threat models, and audit trails.
- **Promoted a security-first culture**, embedding encryption-at-rest/in-transit, least-privilege IAM, and automated dependency checks into the SDLC.

Apple 2013-2017 | Staff Engineer

Tool Stack: Mach-O, dyld, LLVM/Clang, Xcode, LLDB, C/C++, Objective-C, Swift, ARM64 & x86_64 assembly, Git, Jenkins/Bazel CI/CD, Static Analyzers & Sanitizers, Rosetta 2, iOS/macOS Simulator, Angular, React

Roles and Responsibilities

- Drive design and implementation of compatibility shims and dyld enhancements that preserve ABI/API contracts across macOS & iOS releases.
- Build automated validation pipelines—static analysis, symbol-diff checks, and fuzzing—to detect binary breakages early in the release cycle.
- Extend LLVM/Clang and linker features for new CPU instructions and hardened-runtime security while maintaining legacy binary support.
- Collaborate with Xcode, Core OS, and hardware teams to ensure seamless universal-binary workflows and Rosetta translation paths.
- Diagnose performance regressions in pre-release OS builds using LLDB, Instruments, and custom profilers; deliver actionable fixes.
- Mentor engineers through code reviews and knowledge-sharing sessions, championing secure, testable, and reusable low-level code.
- Develop dashboards and in-house app store for tracking priority issues across teams and a solution to allow Apple engineers to access store apps without effecting store metrics.

Samsung 2013 | Senior Software Engineer

Tool Stack: C++ (Boost, Google Protocol Buffers), Custom Linux-based Host OS, Arm Microservers, Node.js (+ Express), AngularJS 1.x, JavaScript/HTML/CSS, REST APIs, Git, Jenkins CI/CD, LLDB/GDB, Linux perf & Valgrind, JSON/RPC, WebSockets, VMware/VirtualBox for test-beds

Roles and Responsibilities

- Architected and shipped a custom C++ host operating system for a new line of rack-mounted Arm microservers, markedly reducing cold-boot time and serving as the firmware foundation for Samsung's commercial microserver platform.
- Built a remote dashboard with Node.js and AngularJS that delivers real-time health telemetry and fleet controls, enabling customers to manage large microserver deployments from a single web console.
- Optimized core services with Boost and Protocol Buffers, lowering serialization overhead, trimming memory footprint, and boosting data-path throughput without sacrificing stability.
- Delivered a responsive web UI adopted by global customers, providing live monitoring of power, thermal, and workload metrics through any standards-compliant browser.
- Established Git-driven CI/CD pipelines with Jenkins, static analysis, and unit testing, accelerating regression detection and supporting rapid release cycles for experimental hardware.
- Collaborated closely with firmware, hardware, and QA teams to diagnose and resolve OS-framework and silicon-interaction defects, ensuring platform stability for market launch.

Texas Instruments 2011-2013 | Software Engineer

Tool Stack: C, C++, ARM (TI OMAP) SoCs, TrustZone, Secure Boot, U-Boot, Fastboot, Linux/Android Kernel, SELinux, OpenMAX IL, GStreamer, JTAG, ADB, Git, Gerrit, GDB, perf, Valgrind, Jenkins CI/CD

Roles and Responsibilities

- Led board-bring-up engagements for Barnes & Noble and Google, coordinating cross-disciplinary engineering teams to deliver secure, fully operational Android platforms on new TI OMAP hardware.
- Implemented TrustZone-based trusted-execution environments and secure-boot chains, fortifying device integrity and safeguarding partner content.
- Hardened the Android Linux kernel—integrating SELinux policy, device-tree updates, and secure page-table management—to support upcoming Android releases and emerging security requirements.
- Designed and optimized OpenMAX IL multimedia pipelines for high-definition playback, refining codec performance and synchronizing audio-video paths.
- Guided client engineering groups through platform upgrades, providing BSP patches, HAL adaptations, and user-space updates that enabled smooth adoption of future Android versions.
- Delivered hands-on debugging support and knowledge-transfer workshops, streamlining issue triage—from bootloaders to user space—and accelerating time-to-resolution for partner teams.

University of North Texas 2008-2011 | Systems Engineering

Tool Stack: Cisco IOS, Juniper Junos, pfSense, macOS Server, Windows Server, Active Directory, Bash, Python, Nagios, Zabbix, Wireshark, DHCP/DNS, VLANs, JAMF, Git, Linux, MacOS Administration

Roles and Responsibilities

- Administered campus network infrastructure—including routers, switches, and firewalls—to provide secure, reliable connectivity for faculty, staff, and students.
- Deployed proactive monitoring and logging with Nagios and Zabbix, streamlining incident response and minimizing unplanned downtime.
- Designed and implemented a layered security posture using ACLs, VLAN segmentation, patch management, and endpoint hardening across macOS and Windows environments.
- Built automated software-deployment and imaging workflows with JAMF, Bash, and Python scripts to standardize desktop configurations and accelerate update rollouts.
- Diagnosed and resolved hardware, software, and network issues for on-site users, combining macOS administration skills with deep troubleshooting expertise to maintain high customer satisfaction.
- Collaborated with campus IT committees to document policies, manage software licensing, and guide hardware-lifecycle planning, ensuring compliance and efficient resource utilization.