

Muhammed Atheeque

Technical Lead with 7+ years of Experience

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EDUCATION

Sathyabama University Chennai

Bachelor Of Engineering (ECE) - 7.2

May 2014 - May 2018

WORK EXPERIENCE

Carl Zeiss

Technical Lead

Mar 2025 – Present

- Led the design and implementation of an OTA-based replacement for Azure ADU functionality, improving update control and enabling real-time device update visibility for edge systems.
- Owned end-to-end provisioning and update workflow integration across DPS, edge device provisioning, API services, and device-side listeners to support reliable OTA delivery.
- Architected a multi-component update solution consisting of an API service to trigger updates, a Web App Service to poll database entries and invoke direct methods, and a systemctl-based device service to receive and process update commands.
- Conducted intensive research and end-to-end validation to replicate ADU behavior in a custom OTA framework, ensuring functional parity while giving users greater operational control than the Azure-managed service.
- Implemented update tracking across multiple time windows, enabling real-time status reporting for each device and improving observability of update progress and outcomes.
- Performed rigorous end-to-end testing on VM-based edge devices to validate update reliability, direct method communication, and service orchestration across cloud and device layers.
- Designed and delivered an endpoint reachability check solution to validate required network allow lists, reducing customer issues caused by unreachable or unwhitelisted endpoints.
- Built a standalone .NET Native AOT-based diagnostics tool to verify endpoint connectivity efficiently on edge VMs, later packaged as a Debian service for systemctl-based deployment.
- Handled proxy-aware connectivity testing and service-level integration to ensure reliable endpoint validation across customer network environments.
- Collaborated across cloud, device, and infrastructure layers to troubleshoot complex deployment issues and improve overall edge system reliability.
- Technologies: .NET, .NET Native AOT, Azure DPS, Azure ADU, Web App Service, API Services, systemctl, Debian packaging, Direct Methods, Proxy Configuration, Edge VM, End-to-End Testing

Senior Software Developer

Jun 2022 – Mar 2025

- Developed and optimized responsive, high-performance UI components using React.js and Redux, implementing cyclical heap capture/release for intensive memory management of large image data, improving page load times and boosting user engagement.
- Built modular front-end connectivity module with Angular to push updates to edge systems, display device status/health, and reduce feature time-to-market.
- Collaborated with cross-functional teams to integrate .NET Core back-end APIs with front-end technologies, including migration from Azure Functions to Web App Service while maintaining code standards, ensuring seamless communication and consistent user experiences.
- Led React.js performance optimization initiatives focused on memory-efficient handling of large image datasets via cyclical heap management, enhancing initial load times and overall user experience.
- Technologies: React.js, React Native, Angular, .NET Core, JavaScript, TypeScript, Linux, Ubuntu

Atos

Associate Engineer

Jan 2020 - Jun 2022

- Implemented state management strategies with Redux and Context API, improving UI performance by 20%.
- Used Chrome DevTools to identify and fix performance bottlenecks, reducing rendering time by 25%. Implemented lazy loading, code splitting, and efficient event handling, improving overall application speed by 35%.
- Developed scalable, responsive UI components using React Hooks and CSS frameworks, increasing app responsiveness by 30%. Ensured optimal user experience through client-side validation and local storage, improving user interaction speed by 20%.
- Tech Stak : React, TypeScript, Vanilla JavaScript

Yume by RythmOne

Campaign Manager

May 2018 - May 2019

- Plan, execute, and optimize marketing campaigns across multiple channels
- Collaborate with cross-functional teams to ensure campaign success.
- Manage budgets, timelines, and resources effectively
- Analyze performance data to refine strategies and maximize impact.

PROJECTS

Connectivity Module | Angular, .Net Core, Azure IOT Hub, Azure IOT Edge

- Led development of Angular-based connectivity application for CM IoT Edge Gateway deployed in hospital networks, integrating OTA update replacement for Azure ADU, DPS provisioning, and real-time device status tracking, reducing feature delivery time.
- Designed multi-tier OTA architecture with API service, Web App Service for database-polling/direct method calls, and device-side systemctl service, enabling superior update control over Azure ADU with real-time visibility across hospital deployments.
- Built endpoint reachability checker as .NET Native AOT standalone tool, packaged as Debian systemctl service with proxy support, eliminating customer connectivity issues caused by unwhitelisted endpoints in hospital networks.
- Optimized Angular performance with load time reduction and faster UI rendering through improved state management, TypeScript, and integration with Ubuntu IoT Edge and Azure IoT Hub.
- Achieved 90%+ test coverage using Karma/Jasmine and SonarQube, reducing production bugs with ESLint enforcement and Advanced Installer MSI packaging for seamless hospital device-cloud communication .

Convivo Pathology Workplace | React JS, Redux, .Net Core

- Developed a high-performance React frontend for Convivo Pathology Workplace, reducing image load time by 40% through caching strategies and lazy loading. Enhanced UI interaction speed by 30% using efficient rendering techniques and design patterns.
- Designed and implemented scalable architecture, improving application performance by 25% through code splitting and memoization. Leveraged Chrome DevTools to identify performance bottlenecks, resulting in a 20% reduction in memory usage.

AIMS | PERN stack

- Developed a supply chain management system using PostgreSQL, Express.js, React, and Node.js, reducing data retrieval time through optimized RESTful API design and enhancing system efficiency.
- Increased test coverage to 90% with Jest and React Testing Library, reducing production bugs. Ensured code quality through best practices like modular code design, ESLint, and Prettier, resulting in improved maintainability

TECHNICAL SKILLS

- Languages : JavaScript, TypeScript, C#, Python, SQL, scripting
- Technologies/Frameworks : React JS, React Native, Angular, .Net Core, Node JS, GitHub, Advanced Installer, Azure Services
- Tools : VSC, Visual Studio, Postgres, Azure

WEBSITE

- [My Website](#)

AWARDS

- **Execution Award** | For exemplary performance and outstanding contribution in recognition of my innovative solution, dedication and commitment to excellence in the field of Software Engineering
- **Spot Award** | Appreciating Atheeque for his passion towards upskilling. Being a front-end developer, in a short period he upskilled in the backend and contributed to a critical area of Connectivity Module development and successfully delivered it
- **Spot Award** | Atheeque has shown good technical expertise in project deliverables. He can understand the technical requirements clearly and convert them into deliverables with fewer inputs. His contribution towards CONVIVO is highly appreciable

CERTIFICATIONS

- Safe Agile Practitioner Certificate