

Ananth Karri

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SUMMARY

Lead Software Engineer with 13+ years of experience developing secure, scalable web, mobile, and desktop applications. Experienced in AI engineering and the AI-Driven Development Lifecycle (AI-DLC), from requirements gathering and technical strategy through deployment, observability, and continuous improvement. Skilled in evaluating AI use cases, supporting data and model workflows, implementing feature flags and frontend observability, and translating business goals into actionable plans. Proven leader of cross-functional Agile teams, with expertise in mentoring engineers, managing multiple projects, priorities and releases simultaneously, resolving technical issues, security violations, and promoting quality, accountability, and engineering excellence.

SKILLS

HTML5, CSS3, SCSS, jQuery, jQuery UI
JavaScript, TypeScript, Micro-frontends
ES6 and above JS versions, JSON, AJAX
Tailwind CSS, Bootstrap, Flexbox, RWD
ReactJS, Next.js, JAMstack, VueJS
Styled-components, Emotion, Storybook
Redux, Redux-Saga, Zustand, Jotai
AngularJS 1.5, Angular 21, RxJS, NgRx

Vitest, React Testing Library, Cypress
TDD, Jasmine, Karma, Protractor, Jest
GraphQL, Redis, Node.js, NestJS, Python
C#, ASP.NET Core, LINQ, EF, MSSQL
MongoDB, SQLite, PostgreSQL, Docker
LogRocket, LaunchDarkly, Branch, JFrog
OpsGenie, Grafana Faro, Grafana Cloud,
Akamai, Husky, Gulp, Webpack, Rsbuild

Modern.js, Figma, Zeplin, Contentstack
Agile/Scrum, AI-DLC, Cline, Copilot
Git, GitHub, TFS, Jira, Confluence
Yarn, NPM, PNPM, GitHub Actions
AWS (Elastic Beanstalk, ECS, RDS)
.NET WinForms, Java (Android)
PHP, MySQL (Academic experience)
ADA, WCAG accessibility compliance

EXPERIENCE

Saxon Global Inc — Lead Software Engineer

DEC 2016 – PRESENT

Client: **MGM Resorts International**, Remote — *Lead Software Engineer*, PRESENT

MGM Resorts International (MGM) is a leading global hospitality and entertainment company, renowned for its diverse portfolio of luxury resorts, casinos, and entertainment offerings.

- Leading an Agile project team of 10+ software engineers developing and maintaining enterprise-level web applications used by MGM customers.
- Overhauled legacy code with frontend design patterns, enhancing code maintainability and decreasing bug issues by 25%.
- Succeeding unit testing and TDD methodologies, increasing software quality by reducing debugging time by 40%.
- Improved code quality by instituting pair programming practices, reducing code review time by 15%.
- Supporting major, minor, and hotfix release cycles, achieving 95% on-time delivery while maintaining clear communication with stakeholders.
- Migrated monolithic react apps into micro-frontend architecture using Module Federation helper for Next.js, enhancing application scalability by 40%.
- Successfully delivered premium homepage and top-nav variants for Cosmopolitan, Bellagio properties in 2026, estimated +\$39.5M incremental annualized revenue.

- Leading and contributing to multiple micro-frontend applications (MFEs) using Module Federation – Discovery, Search Experience, Preferences Center, Dynamic-builder under Platform Experience simultaneously.
- Successfully integrated the Live Chat Widget on the homepage for the first time in a web app at MGM.
- Derived technical solution to reduce user interaction friction for transient users applying for MGM Rewards Mastercard.
- Redesigned and migrated old Account app marketing preferences page to the new preferences center micro-frontend app.
- Successfully integrated Firebase and later with UI content management tool managed by ContentOps in preferences center web app for static content to maintain consistency with mobile app.
- Supporting dining booking flow migration from sevenrooms to new MGM's dining booking application across all discovery owned user journeys.
- Migrated the homepage hero from hls.js to the Wistia player for native Wistia assets, drastically reducing bandwidth consumption and infrastructure costs.
- Successfully migrated old DMP pages - homepage, dining category and Product Detail Pages (PDPs), entertainment landing, results, and PDPs, packages category and PDPs, hotel, casino, and pool PDPs onto Vega design system and dynamic page layout and components authored by ContentOps using dynamic-builder engine.
- Successfully led MGM's initial adoption and implementation of Web Gen3 Architecture and JAMstack using Next.js leveraging Static Site Generation (SSG) across Account Profile, Reservation Management, and Identity front-end applications including Auth SDK, enhancing visual design, consistency, and usability to drive greater customer engagement and conversion.
- Built and maintained the end-to-end build-and-deploy setup for web micro-frontends on Azure, from creating the infrastructure to CI/CD pipelines, storage accounts and releases to Azure Storage static sites including static site hosting, environment setup, and network security.
- Developed MGM's Identity OIDC app along with Auth SDK to support signed sign-on (SSO) across applications for MGM Rewards customers.
- Experienced in taking ownership of complex initiatives, integrating AI-driven capabilities across the AIDLC, resolving technical issues, diagnosing frontend performance and usability concerns, communicating effectively with stakeholders, and making sound decisions under pressure.
- Adopted AI-assisted development: mentored and onboarded engineers through hands-on workshops, reducing real code delivery timelines from days to hours.
- Established stronger experimentation capabilities: LaunchDarkly experimentation, page-level dynamic-builder A/B testing, and multi-armed bandit (MAB), and MGM's newly developed contextual multi-armed bandit (CMAB) proofs of concept.
- Expert in continuous delivery using feature flags to improve productivity, reduce release risk, and accelerate customer value by controlling the percentage rollout of the new features and performing A/B testing.
- Supporting and delivering various SEO improvements: product info boxes on blog pages, persisting the dynamic data on server-side rendered (SSR) pages using custom built SSR prefetch registry hybrid mechanism.
- Implementing front-end observability strategies, and using real-user monitoring (RUM), performance metrics, logging, tracing, and error tracking to improve application reliability and user experience.
- Improved restaurants' operating hours with optimistic language across various components and pages.
- Active participation in production incidents, risk assessment, root cause analysis and cross-functional team communications.
- Led Discovery's domain component library migration from old Indigo design system to new Vega design system at MGM.
- Successfully delivered 100% of the targeted 2024 Vega homepage Phase I and Phase II modules, covering 21 properties.
- Optimized codebase using profiling tools and techniques, leading to 15% faster processing and rendering time.
- Managing on-call schedule, escalation policies, routing rules generating OpsGenie alerts for incident management.

- Monitoring LogRocket sessions, errors, and taking ownership of fixing critical/unusual errors to deliver rich user experience.
- Led the team fixing 100% critical/high GitHub security audit vulnerabilities across multiple projects.
- Collaborating with UX designers and product owners to establish a consistent design system, gather requirements, review designs, timelines, assess technical feasibility and trade-offs, and identify cross-team dependencies and technical bottlenecks early, enabling reusable components, a consistent user experience, and improved maintainability.
- Participating in the test definition meetings organized by QE to cover functional requirements and automation test suites.
- Migrated from Jest to Vitest and improved unit testing performance and coverage to 86%.

HTML5. CSS3. SCSS. JavaScript. TypeScript. ReactJS. Next.js. Rsbuild. Modern.js. Hls.js. Wistia. Styled-components. React Aria. Emotion. Tailwind CSS. Webpack. Babel. Jest. React testing library. Vitest. LaunchDarkly. MAB. CMAB. LogRocket. Branch.io. OpsGenie. REST. JSON. Grafana Faro. Grafana Cloud. Visual Studio Code. Cline. Copilot. GraphQL. Redis. Node.js. Git. Jira. Postman. Agile. SonarLint. JFrog. Docker. GitHub Actions. Apollo Studio. Yarn. PNPM. Micro-frontend. Module federation. Storybook. Firebase. Figma. AI-DLC.

Client: **United Airlines**, Chicago IL — *Lead UI Developer*

United Airlines (UAL) was one of the [2018 CIO 100 Winners](#) for its new Revenue management system, [Gemini](#) which has a significant financial impact. UAL was the first airline to implement a conditional demand forecast model based on fare levels.

- Currently working with the team responsible for implementing a strategic web application of operations research and analytics in the field of Revenue Management (RM) and Pricing.
- The first team to follow Agile methodology in UAL's RM IT group. Proactive agile team player in a team of 20 developers.
- Authenticated users with DataPower OAuth service.
- Peer code reviews using Git workflow in TFS.
- Developed JS library compatible with AngularJS 1.x for Hotkeys functionality.
- One of a two-person team migrated existing AngularJS 1.5 codebase to TypeScript and implemented Redux architecture.
- Developed an Angular 8 application from scratch using the latest design patterns, such as NgRx, RxJS, ES6, and connected to ASP.NET Web APIs.
- Migrated .NET WinForms tool to ReactJS app, developed from scratch using the latest ES6, ES7, ES8 features, React Router, Redux, Redux-Saga, and created mock RESTful APIs in Node.js.
- Worked on responsive design and developed a single isomorphic responsive web app that could be served to laptops, tablets and mobile users using ReactJS.
- Involved in R&D of JavaScript Microfrontends using single-spa, Angular, ReactJS, VueJS, AngularJS.
- Delivered complex user stories with zero defects and received appreciations from managers, scrum masters, Dev, QA leads.
- Deployed in AWS DevOps ecosystem using Jenkins to deliver docker containers to cluster of Amazon EC2 instances.
- Flexible to take on backend and database tasks using C#, ASP.NET Web APIs, EF, LINQ, MSSQL when necessary.
- Collaborated with QAs, POs in sprint, regression, UAT, smoke testing, and provided hotfixes for critical defects.
- Received appreciations from POs on accepting and delivering UI/logical changes at any development phase.
- Setting up CI/CD pipelines on TFS, AWS (CodePipeline). Collaborated with enterprise EQA team in fixing deployment issues.
- Participated in high-level grooming/estimation sessions, sprint planning meetings, daily stand-ups, defect triage, sprint retrospective meetings, presenting demos to POs, production deployments.
- Followed test-driven development (TDD) technique using Jasmine and Karma for Angular and Jest for React apps.
- Taking the lead on bug fixing, resolved major design layout and logical defects.

- Analyzed and updated existing npm packages and fixed code breakages. Setting up SonarLint in local repositories and connect to SonarQube server to sync the industry defined ruleset, reduce bugs and security vulnerabilities.
- Successfully handled multiple projects by identifying priorities implemented using different JS frameworks or libraries such as AngularJS, Angular, jQuery, ReactJS, and supported parallel production releases/outages.

HTML5. CSS3. SCSS. JavaScript. TypeScript. jQuery. jQuery UI. ECMAScript 6. AngularJS 1.5. Redux. Angular Material Design. Flexbox. ReactJS. Redux-Saga. Angular 8. RxJS. VueJS. Gulp. Webpack. Babel. Handsontable. Highcharts. Lodash. Gridstack. Jasmine. Karma. Protractor. Jest. REST. JSON. SignalR. C#. ASP.NET Web APIs. Entity Framework 6. LINQ. Visual Studio Code. FluentValidation. Microsoft. SQL Server. Node.js. Git. TFS. Postman. Agile. SonarLint. Docker. AWS Cloud. Visual Studio.

ITSyntax, McKinney TX — *UI Developer/Programmer Analyst*

SEP 2016 – NOV 2016

- Worked on a Recruitment Candidate Relationship Management System, an internal tool for hiring professionals to build and maintain relationships with job seekers while parallelly managing the whole recruitment process.
- Developed front-end new user-facing features, reusable, dynamic forms components using ReactJS, Redux.
- Attended daily stand-up meetings to update the team about the progress on current work assignments and development impediments.
- Learned concepts and implementation using Redux architecture, Node.js, and MongoDB.

HTML5. CSS3. SCSS. JavaScript. ReactJS. Redux. Material Design. REST. JSON. Node.js. MongoDB. Git. Postman. Agile.

Hanshini Infotech, India — *Software Developer*

JUN 2012 – AUG 2015

- Analyzed user requirements and designed templates as per mockups.
- Developed a vanilla JS library to display dynamic tables, captures user's inputs, and submits data to APIs.
- Developed a desktop application for the POS system using C#, .NET WinForms, and Microsoft SQL Server.
- Developed cloud-based e-commerce ADA compliance web app using AngularJS, jQuery, bootstrap, ASP.NET MVC, MSSQL.
- Designed dynamic, richly formatted reports using SAP Crystal Reports and integrated into desktop/web apps.
- Developed an android app using Java for tracking sales/purchases/inventory by retail business owners.
- Familiarity with Content Management System (CMS) concepts or its use in e-commerce environment.

HTML. CSS. JavaScript. jQuery. AngularJS. Bootstrap. C#. .NET WinForms. ASP.NET MVC. CMS. Microsoft SQL Server. SAP Crystal Reports. Java (Android). REST. JSON. SVN. Visual Studio 2012.

TJL Technologies, India — *Software Engineer Intern*

DEC 2011 – APR 2012

- Developed a desktop application for an Exam Cell Automation System using Java and Oracle database.
- This application was built to manage faculty, students, classrooms, organizing and conducting exams, allocating students, and faculty to the exam rooms based on availability, maintaining students' marks.

Java SE 7. Oracle 11g.

EDUCATION

Master of Science in Computer Science (MSCS), 2015 – 2016, GPA: 4

* Focused on Mobile & Web Technologies and Database management systems

San Francisco Bay University, Fremont, California, USA

Bachelor of Technology in Computer Science & Engineering (B. Tech), 2008 – 2012

Jawaharlal Nehru Technological University, Kakinada, India

ACTIVITIES, CERTIFICATIONS, HONORS, AND AWARDS

IBM Certified Academic Associate, DB2 9 Database and Application Fundamentals

OCT 2011

COIGN Certified Android Application Developer by COIGN Consultants Pvt Ltd

JUL 2011

* Awarded first prize for being proactive, exhibited exceptional skills in rapid coding among peers

Sun Certified Professional, Java SE5 Programmer

SEP 2010

FREELANCE PROJECTS

Library check in check out (LibraryCICO)

- Developed v1.0 web application for engineering colleges to manage students' details, track their visiting hours, and spending time in libraries.
- Students can tap their RFID embedded id cards onto a reader every time they step in and out of the library and application takes care of required computations.
- This web application helps colleges to provide expensive learning resources and improve cultural, social, and intellectual roles in bringing together people and ideas outside the classroom environment.
- Built using HTML, CSS, jQuery, jQuery UI, C#, ASP.NET MVC, MSSQL database, and deployed to intranet IIS.
- Featured in our engineering college magazine for successfully delivering and managing the application, earning recognition from JNTUK Directorate of Academic Audit committee, college principal and faculty.

SmartPOS

- Migrating an existing solely developed desktop C# WinForms application to a cross-platform application, enabling retail business owners to operate more efficiently and improve ease of doing business.
- Providing native desktop capabilities to the web and mobile platforms providing end-users.
- Applying proven design patterns and end-to-end system design principles to build efficient, reliable software.
- Adding autonomous AI agents to transform into a self-driving operations manager and reducing operational costs.