



Bharat Ramesh

Engineering Manager | Agile Leader | Software Architect | Cloud, Data & Full-Stack Leader

Pittsburgh, PA | Ph: 215 494 6246 | Email: bharatramesh2601@gmail.com | LinkedIn: [linkedin.com/in/rameshbharat](https://www.linkedin.com/in/rameshbharat)

Professional Summary

Engineering Leader & Software Architect with 13+ years of experience designing **cloud-native, AI-driven systems** across **AWS, GCP, and Azure**. Builds **scalable architectures, distributed systems, AI/ML automation, and real-time data processing**. Optimized **20+ enterprise applications**, achieving **99.9% uptime** and improving **team productivity by 25%** through **Agile transformations**. Leads **data architecture, governance, cloud migrations, and security frameworks** to ensure seamless **data integration and performance optimization**. Develops **AI solutions, predictive analytics, and automation**. Aligns **technology with business goals**, mentors teams, and drives digital transformation.

Core Competencies

- **Backend:** Node.js, Java, Spring Boot, Python, Go, Kotlin, GraphQL, REST, gRPC, Express.js, Django/Flask
- **Frontend:** Angular, React, React Native, Next.js, TypeScript, JavaScript, Redux, Webpack, Vue.js, Bootstrap, Material UI, SCSS, SASS, LESS, ES Lint, Prettier
- **Databases, Storage & Streaming:** SQL (PostgreSQL, MySQL, Oracle, SQL Server), NoSQL (MongoDB, DynamoDB, Firebase, Redis, BigQuery), Kafka, RabbitMQ, Redis, Elasticsearch, Cassandra
- **Cloud & DevOps:** AWS, Lambda, API Gateway, EC2, S3, Pub/Sub, Cloud Functions, Firestore, Kubernetes, Docker, ArgoCD, CI/CD
- **Security & Authentication:** OAuth 2.0, JWT, RBAC, SAML, Compliance (HIPAA, NIST)
- **AI/ML & Analytics:** TensorFlow, PyTorch, OpenAI APIs, LLMs, NLP

Professional Experience

Forbes Media LLC (Remote) | Engineering Manager & Software Architect | Cloud, AI & Full-Stack Leader

Sep 2021 – Feb 2025

- Led a **20+ member engineering team**, including **9 offshore engineers**, fostering a high-performance culture with **SAFe Agile methodologies**, resulting in **35% faster sprint cycles**.
- Served as **Interim Director of Engineering**, maintaining operational stability with **zero disruptions** while leading **mobile application development** for the **Forbes iOS & Android apps**.
- Led engineering for **Forbes Vetted** for 3 years, driving **millions in affiliate revenue** by **optimizing content-driven product recommendations across platforms**, ensuring sustained growth and engagement.
- **Recruited and coached top engineering talent**, driving **team engagement, career growth, and performance management** to **build a world-class team**.
- Led the enhancement of **Forbes' proprietary CMS platform** that empowered authors to **seamlessly create and administer article content**; established workflows that reduced average editing time by **two hours per article**.
- Built a **CMS-integrated approval workflow** ensuring that **only validated coupons and vendor deals went live**, reducing invalid coupon occurrences by **70%**.
- Fostered a culture of **ownership, collaboration, and continuous improvement**, ensuring the team remains **responsive in ambiguous, high-impact projects**.
- Catalyzed a culture shift towards asynchronous learning via **Loom videos** combined with **content on Slab**: provided clarity while eliminating redundant meetings—empowering team members with instant access to essential resources daily.
- **Event-Driven AI Pipelines:** Architected a **Pub/Sub-based promotional system**, **automatically distributing AI-recommended deals to email, push notifications, and mobile apps**, increasing engagement by **40%**.
- **Content Optimization with AI**, Integrated **NLP content classification models** to **automate metadata tagging and improve SEO**, resulting in a **25% increase in organic traffic**.
- Migrated legacy **Wordpress-based CMS** to **Angular**, **refactoring core UI components** and improving **performance by 40%**.
- **Launched scalable App Store analytics dashboards**, integrating **big data processing and visualization solutions** using **Snowflake & BigQuery**.
- **Defined program roadmaps, KPIs, and success metrics**, tracking impact via **real-time analytics and executive-level reporting**.
- **CI/CD Pipelines & DevOps Automation** with **Jenkins, Kubernetes, Terraform, and GitHub Actions**, reducing **deployment errors by 50%**.

Technologies: ReactJS, Next.js, Angular (14/18), TypeScript (Classes & Interfaces, Decorators), JavaScript, Redux, Webpack, SCSS, SASS, Bootstrap, Material UI, Node.js, Go, Python, Java, Spring Boot, Express.js, Kotlin, AWS (Lambda, API Gateway, RDS, DynamoDB, S3, CloudFront), Google Cloud (Pub/Sub, BigQuery, Firestore), Kubernetes, Terraform, CI/CD (Jenkins, GitHub Actions, ArgoCD), PostgreSQL, MongoDB, Redis, ETL-Pipelines, Data Ingestion, Apache Kafka, WebSockets, OAuth2, JWT, OpenID Connect, Role-Based Access Control (RBAC), Active-Directory, API Rate Limiting, gRPC, GraphQL, REST APIs, Serverless, Event-Driven Architecture (Pub/Sub, Kafka).

- Led and deployed **AI-enhanced real-time analytics dashboards** using **Angular & D3.js**, enabling store managers to **track sales trends, inventory levels, and customer behavior in real-time**, improving stock management by **25%**.
- **Translated high-level business objectives into actionable execution plans**, defining **key deliverables, success criteria, and impact-driven metrics**.
- **Engaged and influenced stakeholders**, ensuring **data-driven decision-making** throughout the project lifecycle with meaningful analysis and insights.
- **Led executive-level reporting**, distilling **complex technical information into digestible summaries** for audiences, including senior leadership and external partners.
- **Empowered engineering teams with clear technical guidance**, fostering **collaboration, accountability, and program visibility** across departments.
- Optimized **self-service touch-to-order kiosks and QSR drive-thru solutions**, integrating **AI-driven predictive ordering** to **reduce wait times and improve order accuracy by 30%**.
- Developed **QR code scanning-based ordering systems**, allowing **contactless checkouts** and reducing **manual entry errors by 35%**.
- **Designed high-availability RESTful APIs** supporting **millions of daily transactions**, ensuring **99.99% system uptime** across global deployments.
- **Enhanced electronic funds transfer (EFT) systems**, integrating **ATP development drivers** that reduced **payment processing times by 30%** while ensuring **secure, PCI-compliant transactions**.
- **Established real-time communication frameworks using WebSockets**, reducing kiosk latency by **60%**, ensuring **instant transaction processing even during peak hours**.
- **Architected AI promotions & upsell recommendations** based on **customer interaction data**, increasing **average order value by 15%**.

Technologies: Angular 8, Node.js, REST APIs, GraphQL, AWS (S3, Lambda, DynamoDB, API Gateway), CI/CD (Jenkins, Terraform, Kubernetes, Argo Workflows), Firebase, MongoDB, PostgreSQL, Redis, Kafka, WebSockets, ATP Drivers, AI-driven Fraud Detection, Predictive Analytics, **Facial-Recognition, QR Code Scanning, Computer Vision**, QSR Drive-Thru Solutions, NLP-Based Customer Insights.

- Developed an **Angular & Java-based SRE platform**, enabling **real-time monitoring of data center hardware issues** and **reducing incident resolution time by 50%**.
- **Integrated AI-driven predictive analytics** into **infrastructure monitoring tools**, enabling **failure detection and reducing service disruptions by 40%**.
- **Migrated 15+ legacy GWT applications to modern Angular frameworks**, improving **application performance, reducing page load times by 40%**, and **enhancing user engagement metrics** across platforms.
- **Implemented GraphQL APIs within monitoring services**, reducing **API latency by 30%** and improving **real-time query performance** for SRE teams.
- **Constructed a robust event-driven architecture** leveraging **Kafka & WebSockets**, enabling **real-time data streaming and improving responsiveness by 75%** for mission-critical operations.

Technologies: Angular 6+, Angular Material, Node.js, Java, Python, TypeScript Google Cloud (GCP), Webpack, CI/CD (Jenkins, GitHub Actions), SRE, Terraform, PostgreSQL, Docker, Kubernetes, Google Maps API, Prometheus, Grafana, Microservices Architecture, Kafka, WebSockets, Predictive Analytics, Event-Driven Systems, Automation, AI Monitoring.

- **Automated regulatory reporting workflows**, leveraging **SQL & Power BI dashboards**, improving **data visibility for leadership teams**.
- **Comprehensive security measures**, integrating **OAuth2 and JWT strategies**, ensuring **zero unauthorized data breaches** while providing a **seamless user experience during sensitive healthcare transactions**.
- **Composed API security** in compliance with **HIPAA & NIST standards**, reducing security vulnerabilities to **zero incidents** across all critical healthcare applications.
- Engineered **backend microservices using Node.js & Express.js**, ensuring **99.99% uptime**, improving **real-time claims processing** and **seamless data exchange with external healthcare providers**.
- Modernized **Angular UIs for Medicare pre-qualification systems**, improving **accessibility for 15,000+ users** and ensuring **ADA & WCAG compliance**.
- Built **real-time visual dashboards in React**, allowing **cross-departmental teams to access project performance data in under five seconds**, improving **operational efficiency**.

- Transitioned legacy monolithic applications to modern microservices architecture, enhancing scalability and handling a 40% increase in user traffic without performance degradation.
- Devised optimal caching methodologies with Redis that decreased average RESTful APIs response times by 40%, thereby streamlining processes for both claims handling and access to critical medical records.
- Improved claim validation processes, improving accuracy and reducing approval turnaround times by 25%, increasing customer satisfaction.
- Led DevOps transformation, integrating CI/CD pipelines with Jenkins & Kubernetes, reducing deployment time by 50% while improving release frequency and stability.

Technologies: Angular, React, Redux, Node.js, Express.js, PostgreSQL, Redis, OAuth2, JWT, Kubernetes, Terraform, Jenkins, Jest, Cypress, Microservices, API Security, HIPAA Compliance, CI/CD.

AtLarge Inc | Sarasota, FL *Software Engineer | Mobile & Web Applications,*

Jan 2016 – Jun 2016

- Launched 10+ responsive client websites using **Drupal, React, and Bootstrap**, optimizing layouts to increase user engagement and session duration by 15 minutes per visit.
- Implemented 3 **Angular-based web applications** optimized for **mobile-first platforms**, ensuring cross-device compatibility and **WCAG 2.1 compliance**, resulting in a 40% increase in mobile user engagement.
- Executed cross-browser compatibility testing on 15+ websites, identifying and resolving load time inefficiencies to improve site performance by 20%, leading to a smoother user experience.

Technologies: ReactJS, Angular, Drupal, React Native, Bootstrap, HTML5, CSS3 (SASS, LESS, SCSS), JavaScript, WCAG, MySQL, Cordova, Android (Java/Kotlin), iOS (Swift), Apache Cordova, Node.js (Express), PHP (Drupal, WordPress), MongoDB, MySQL, SQL Server, Docker, Kubernetes, Jenkins, GitHub Actions, Bitbucket Pipelines, Gulp, Grunt, MAMP.

Deloitte India | Web Dev and Project Management Lead | CRM, SharePoint & Vendor Management, Feb 2012 – Dec 2014

- Led the migration of Deloitte Australia's intranet platform to **SharePoint**, ensuring seamless document accessibility, team collaboration, and a 30% reduction in project inquiry response time.
- Administered the CRM database for Deloitte Australia, ensuring data integrity across 200+ client records, optimizing relationship management strategies and client interactions.
- Managed vendor relationships and procurement databases, ensuring accurate tracking of service agreements, reducing administrative workload by 20%.
- Executed detailed data audits using **SQL & Oracle DB**, creating comprehensive reports for marketing teams that improved customer segmentation accuracy, leading to a 15% increase in campaign engagement.

Technologies: Salesforce CRM, SQL, VBA, SharePoint, Power BI, Vendor Management, SharePoint WebParts, JavaScript (jQuery, AJAX), HTML, CSS, .NET (C#), ASP.NET MVC, SharePoint REST API, Microsoft SQL Server, Oracle, MySQL.

HSBC India | Business Banking Analyst (CRM Data & Contact Management),

Aug 2011 – Jan 2012

- Maintained clean & structured financial customer data by integrating a **CRM system with ETL pipelines & automation tools**.

Technologies: Internal CRM Web App (React, jQuery, Bootstrap, HTML, CSS), .NET (C#), Microsoft SQL Server.

Education:

Florida Institute of Technology, Melbourne, FL | Master of Science – Computer Science | May 2016 | 3.9/4.0

DRK Institute of Science and Technology, India | Bachelor of Engineering – Electronics & Communication | May 2011 | 3.5/4.0

Certifications:

Project Management Institute: Agile: Scrum for Developers, Scrum: Advanced, Leading with Emotional Intelligence

LinkedIn: Generative AI, Google Cloud Foundations

Databricks: GCP Databricks Platform Architect, Generative AI Fundamentals

MongoDB: MongoDB Node.js Developer Path

Google: Google Cloud Digital Leader
