Bhupesh Chikara

+1 (315) 575 7385 | bhupeshchikara@gmail.com | linkedin.com/in/bchikara | builtbychikara.dev

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, Java
Frontend: React, Next.js, Angular, Redux, Zustand, RxJS
Backend: Node.js, Express.js, GraphQL, REST API, Socket.IO, WebSocket, WebRTC
Databases: MongoDB, PostgreSQL, MySQL, Redis, DynamoDB, Firebase
Cloud & DevOps: AWS (EC2, S3, Lambda), GCP, Docker, Kubernetes, Jenkins, CI/CD
AI & Tools: Google Gemini API, GPT-4 Vision, D3.js, Three.js, Playwright, Selenium, LaTeX, Git
Concepts: Data Structures & Algorithms, System Design, Microservices, Distributed Systems

EDUCATION

Syracuse University   Syracuse, NY
Master of Science in Computer Science   *Jan. 2024 – Dec. 2025*

EXPERIENCE

Deloitte | *Senior Software Engineer*   Feb 2021 – Jan 2024

Technologies: React.js, Node.js, GraphQL, D3.js, Three.js, TypeScript, Docker, AWS, Kubernetes, Jenkins
- Architected React/Redux dashboards with D3.js/Three.js visualizations, boosting engagement 35% and reducing decision time 25% via component design and memoization.
- Redesigned GraphQL service with schema stitching solving N+1 problem, cutting over-fetching 40% and achieving 99.99% uptime using circuit breaker patterns.
- Led system design reviews, authored 7 HLD/LLD docs, containerized apps with Docker/Kubernetes, and built CI/CD pipelines automating 100% builds via blue-green deployment.

ToTheNew Pvt. Ltd. | *Software Engineer*   Feb. 2020 – Mar. 2021

Technologies: Angular 4+, RxJS, Node.js, Express.js, MongoDB, REST API, TypeScript
- Transformed PWC dashboard to Angular 4+ with lazy-loading and RxJS, implementing code-splitting/tree-shaking reducing bundle size 25% and improving engagement 18%.
- Designed REST API and MongoDB schema with indexing/aggregation for TCH portal, resolving top 3 crashes and scaling to 500+ concurrent users.
- Engineered async workflows with RxJS operators (switchMap, debounceTime), request caching, and retry logic, decreasing page load 50% and boosting retention 15%.

PROJECTS

Opus ↗ | *Node.js, TypeScript, BullMQ, FFmpeg, Socket.IO, AWS S3, Redis, GraphQL, PostgreSQL, Python Flask*
- Reduced post-recording wait from 50 min to 5 min by architecting progressive chunk upload with 10-sec intervals, processing 90% of video during recording via BullMQ and FFmpeg across 6 microservices.
- Built cloud-native architecture orchestrating 6 services (API, Media Processor, TTS, Transcription, Translation, WebRTC) using Apollo GraphQL gateway, PostgreSQL, and Redis pub/sub.
- Deployed 3 AI features handling 1000+ concurrent requests: Coqui TTS voice generation, Whisper ASR with speaker detection, and GPT-4 chapter/highlight generation with MongoDB persistence.

LaCarte ↗ | *React, TypeScript, Zustand, Firebase, Recharts, Material UI, Layer Payments, Razorpay*
- Architected dual-write pattern for distributed order persistence across 3 Firebase stores with ACID compliance, serving 100+ restaurants and 10K+ daily orders at 99.99% uptime.
- Implemented real-time Firebase listeners enabling 5+ staff to manage orders without polling, utilizing 10-transition state machine with sub-second latency.

CodeNova ↗ | *Next.js 15, TypeScript, Node.js, MongoDB, Socket.IO, Judge0 API, Google Gemini API, Anam AI SDK*
- Built full-stack platform with Socket.IO real-time code execution via Judge0 for 8+ languages, achieving sub-500ms response across 155+ problems with MongoDB indexing.
- Created 9+ algorithm visualizers with smart step generation and Excalidraw whiteboard integration, deploying dual AI tutoring (Gemini + Anam voice avatar).

ACHIEVEMENTS

Best Use of AI Award – CuseHacks 2025 — Syracuse University — Won for CodeNova AI platform with Gemini tutoring, Anam voice avatar, and 9+ visualizers

Applause Award (3x Consecutive) — Deloitte 2021-2024 — Recognized for backend architecture, algorithmic solutions, and technical leadership