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JAYAMPATHY BANDARA

SENIOR ANGULAR DEVELOPER | FRONTEND ARCHITECT | SENIOR FULL STACK ENGINEER

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PROFESSIONAL SUMMARY

Senior Full Stack Engineer with 10+ years specializing in Angular frontend and Nest.js backend development, with proven expertise in microservices architecture across FinTech, EdTech, and Fortune 500 enterprises. Delivered mission-critical solutions for financial institutions (Web3 platforms, banking systems), educational technology platforms (300+ institutions), and Fortune 500 telecom companies (CSG International - 1M+ users). Expert in building high-performance, scalable systems using Angular 18, Nest.js, and event-driven microservices architecture. Track record of reducing development cycles by 35%, improving system performance by 60%, and delivering secure, compliant solutions for regulated industries.

TECHNICAL EXPERTISE

Frontend Development: Angular (2-18) • TypeScript • RxJS • NgRx • Angular Material • Signals • Standalone Components • Micro-frontends • Angular Elements • Server-Side Rendering • Change Detection Optimization

Backend & Microservices: Nest.js • Node.js • Express.js • Microservices Architecture • Event-Driven Architecture • Message Queues • RESTful APIs • GraphQL • WebSockets • API Gateway Patterns • Service Mesh

Architecture & Design Patterns: Domain-Driven Design (DDD) • CQRS • Event Sourcing • Clean Architecture • Hexagonal Architecture • Circuit Breaker • Saga Pattern • API Gateway • Backend for Frontend (BFF)

Databases & Caching: MongoDB • PostgreSQL • Redis • Oracle • TypeORM • Prisma • Database Optimization • Query Performance Tuning • Data Modeling

DevOps & Infrastructure: Docker • Kubernetes • CI/CD (GitHub Actions, Jenkins) • Nx Monorepo • AWS • Cloud Architecture • Container Orchestration • Infrastructure as Code

Testing & Quality: Jest • Cypress • Jasmine • Karma • Unit Testing • Integration Testing • E2E Testing • TDD • Performance Testing • API Testing

Real-time & Communication: Socket.io • WebSockets • Server-Sent Events • Message Brokers (RabbitMQ, Kafka) • Real-time Data Synchronization • Event-Driven Communication

LEADERSHIP & SOFT SKILLS

- **Technical Leadership** - Led cross-functional teams of 8+ developers across multiple time zones
- **Mentorship & Coaching** - Mentored 12+ junior developers, improving team productivity by 25%
- **Cross-functional Collaboration** - Coordinated with UX, DevOps, and business teams for seamless delivery
- **Stakeholder Management** - Translated complex technical requirements for C-level executives
- **Agile Methodologies** - Implemented Scrum/Kanban practices, increasing sprint velocity by 30%
- **Problem-Solving** - Architected solutions for complex scalability challenges (1M+ daily transactions)
- **Conflict Resolution** - Mediated technical disagreements, ensuring project timeline adherence
- **Change Management -** Successfully migrated legacy systems to modern microservices architecture

PROFESSIONAL EXPERIENCE

PRINCIPAL ANGULAR DEVELOPER | ARCHITECTURE LEAD | CompileForge
June 2024 - Present (Remote)

Enterprise EdTech Platform - Angular 18 + Nest.js Microservices Architecture
Led the complete architectural transformation from Next.js to Angular 18 with Nest.js microservices backend, serving 300+ educational institutions with 10,000+ concurrent users and 99.9% uptime.
- **Angular 18 Architecture**: Built enterprise platform with Signals + NgRx serving 300+ institutions; reduced load time 75% (8s→2s).
- **NestJS Microservices**: Architected 12 microservices with Fastify + Supabase PostgreSQL and implemented Fly Machines + Firecracker for secure code execution with built Socket.io real-time grading.
- **Scalable Infrastructure**: Deployed on Fly.io with BullMQ + Upstash Redis queues (1,000+ jobs/min); Cloudflare R2 storage (100,000+ submissions); with 99.9% uptime together with auto-scaling
- **Business Impact**: Reduced grading time 60%; processed 50,000+ monthly submissions.
- **Tech Stack**: Angular 18, NestJS, Fastify, Supabase, Fly.io, Upstash Redis, Socket.io, Monaco Editor, NgRx, Nx Monorepo, 85% test coverage (Jest + Cypress).

SENIOR FULL STACK DEVELOPER | Senior Consultant - Full-Stack Web3 Developer | ChainFortress
June 2023 - June 2024 (Remote)

Web3 Document Management Platform - React + Node.js Microservices
Architected full-stack Web3 platform with microservices backend serving 100,000+ monthly transactions for legal and financial institutions.
- **Full-Stack Web3:** Built React 18 + Next.js 13 platform with Web3.js integration; GraphQL + Apollo Client (40% faster data retrieval); Material-UI + WCAG 2.1 AA compliance; SSR for SEO optimization
- **Blockchain Development:** Architected Ethereum smart contracts with Solidity; 45% gas optimization saving $100K+ annually; cross-chain support (LayerZero, Axelar); IPFS + AES-256 encryption (35% cost reduction)
- **Backend Microservices:** Developed Node.js + Express.js + MongoDB APIs (10,000+ daily transactions, 99.9% uptime); Redis caching (70% query reduction); JWT + OAuth2 authentication
- **DevOps & Security:** CI/CD with Jenkins + Kubernetes on AWS (50% faster deployment); smart contract audits with 90% test coverage (Hardhat/Foundry); zero security breaches
- **Tech Stack:** React, Next.js, Node.js, MongoDB, Solidity, Web3.js, IPFS, GraphQL, Docker, AWS; 100,000+ monthly transactions across 5 blockchain networks

SENIOR ANGULAR CONSULTANT | CSG International
March 2020 - June 2023 (Remote)

Enterprise Telecom Platform - Angular + Spring Boot Microservices
Led Angular development for Fortune 500 telecom platform serving 1M+ users across APAC markets.
- **Angular Enterprise Architecture:** Built component library (50+ Angular Material components + Storybook); NgRx state management (40% performance gain); micro-frontends with Module Federation; 35% bundle reduction
- **Testing & Quality:** Elevated coverage 65%→95% (Jest, Jasmine, Cypress); reduced bugs by 60%; achieved LCP <2s, FID <50ms; WCAG 2.1 AA compliance for Singapore standards
- **DevOps Excellence:** Optimized CI/CD with Docker + Kubernetes (45min→10min deployment); blue-green deployments; Prometheus/Grafana monitoring; zero-downtime releases for 24/7 ops
- **Team Leadership:** Led 8 developers across APAC regions; 25% sprint velocity increase; reduced delivery time 40%; mentored 5 junior developers; served 1M+ users with 99.8% availability
- **Tech Stack:** Angular 12-15, NgRx, TypeScript, Angular Material, Jest, Cypress, Docker, Kubernetes; integrated 15+ microservices; MAS/DFSA compliance; 10,000+ daily interactions

TECHNICAL LEAD | Cinglevue International
January 2019 - March 2020

Education Management Platform - Angular Micro-frontends + Spring Boot Microservices
Led modernization of legacy platform into scalable micro-frontend and microservices architecture.
- **Micro-Frontend Architecture:** Engineered 20+ Angular Elements micro-frontends with Module Federation; built 50+ component library (60% code reduction); optimized bundle loading (50% faster transitions)
- **Spring Boot Microservices:** Architected 15 microservices with Spring Cloud (60% scalability gain); Spring WebFlux reactive APIs; event-driven with RabbitMQ; Spring Data JPA + MongoDB
- **Legacy Modernization:** Migrated 100,000+ LOC with strangler fig pattern (zero downtime); 85% test coverage (JUnit, Mockito); automated migration tools (70% effort reduction)
- **Security & DevOps:** Keycloak security (10,000+ concurrent users); Singapore PDPA + GDPR/FERPA compliance; Docker + Kubernetes auto-scaling; CI/CD with Jenkins; Prometheus/Grafana monitoring
- **Tech Stack:** Angular 8-9, Angular Elements, Spring Boot, Spring Cloud, MongoDB, Redis, Keycloak, Docker, Kubernetes; served 500,000+ students; 35% faster development cycles

TECHNICAL LEAD | eBuilder Technology Centre
October 2014 - December 2018

Enterprise Financial Platform - Full Stack Development
Led full-stack development of travel and expense management platforms for Nordic financial institutions.
- **Full-Stack Development:** Built Bootstrap + ExtJS SPAs for Nordea Bank; JavaScript/jQuery optimization (45% performance gain); ExtJS virtual scrolling grids (10,000+ records); responsive design (60% mobile engagement increase)
- **Oracle Database Architecture:** Designed schemas for 1M+ daily financial transactions; optimized SQL/PL/SQL (50% processing reduction); complex stored procedures for multi-currency; indexing strategies (70% query improvement)
- **Backend & Integration:** Java Spring microservices with RESTful APIs; batch processing for reconciliation; integrated payment gateways and booking systems; 30+ component reusable library
- **DevOps & Quality:** CI/CD with Bamboo + Maven (40% faster deployment); automated testing (JUnit, QUnit, 80% coverage); load testing (10,000+ concurrent users); 99.9% uptime during critical periods
- **Career Growth & Impact:** Associate Engineer → Technical Lead; led 6-person team; $10M+ annual savings; served Nordic financial institutions; mentored 5 junior developers

EDUCATION & CERTIFICATIONS

- Bachelor's Degree in Information Technology, BCS, The Chartered Institute for IT
- Frontend Expert Certification, Algoexpert
- Blockchain Expert Certification, Algoexpert
- Oracle Certified Associate (OCA), Oracle University
- AWS Certified Solutions Architect (In Progress)
- Google Developer Expert (GDE) (In Progress)