Arjun Palakkazhi

Software Architect - Bangalore, India

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SUMMARY

Software architect with 7+ years of professional experience and over a decade of programming, building cloud-native, AI-driven SaaS platforms. I have led 50+ mid-to-large projects across healthcare, telecom, security, automotive and construction, from architecture to production. I validate ideas with data and fast prototypes, then build them to scale.

EXPERIENCE

Solution Architect / Director, Sketchmonk

Apr 2022 – Present

- Designed high-level and low-level architectures for AI-powered SaaS applications.
- Built backend REST APIs and microservices in Node.js, Go and Python for scale and modular deployment.
- Built frontend applications in React and Vue on real-time data pipelines.
- Led DevOps: Docker images, deployments on AWS and DigitalOcean, CI/CD on GitLab pipelines.
- Designed multi-agent AI workflows with LangGraph and n8n, using LLMs for automation and decision support.
- Built a face recognition surveillance system: MTCNN + ArcFace, Flask + gRPC backend, Vue frontend, Qdrant + OpenSearch for vector search.

Software Engineer, Tata Elxsi

Sep 2019 – Mar 2022

- Researched NLP, building and evaluating deep learning models for domain-specific tasks.
- Built REST APIs and web front ends for ML models in production.
- Designed and tested microservice architectures for scalability and modular deployment.
- Containerised solutions with Docker and CI pipelines for fast iteration.
- Improved system performance and reliability through internal design reviews.
- Built Flutter mobile apps for internal AI tools.

PROJECTS

Construction operations platform

Real-estate developer · Construction | 2026

A construction operations platform for a real-estate developer: estimates, procurement, site progress and payments on one record, from first estimate to final payment.

Stack: Next.js, PWA, Bun, ElysiaJS, PostgreSQL

Video intelligence platform

Private security company · Security & operations | 2026

A self-hosted video intelligence platform: live camera feeds become searchable events, alerts and scheduled reports, with no footage or face data leaving the organisation.

Stack: Python, ONNX Runtime, Qdrant, Next.js, ElysiaJS

B2B sales platform

Nutrition-products distributor · B2B sales | 2025

A custom B2B sales, pricing and fulfilment platform for a growing distributor: every order priced correctly, approved properly, shipped traceably and reported on live.

Stack: Next.js, Bun, ElysiaJS, PostgreSQL, BullMQ

Sleep scoring course

Sleep Study Academy · Healthcare education | 2024

An online training and assessment platform for sleep technologists. Trainees score real sleep studies page by page and are graded at once against an expert key. Educators author the studies, review the work and export performance.

Stack: Vue 3, AdonisJS, PostgreSQL, Konva, ExcelJS

SKILLS

Languages: Python, Go, JavaScript, TypeScript

Frameworks: NestJS, Flask, FastAPI, AdonisJS, ElysiaJS, tRPC, Express, React, Next.js, Vue, LangGraph, BetterAuth, Encore.ts, Prisma, Drizzle ORM, Tailwind CSS, shadcn/ui, Temporal

Databases: PostgreSQL, MongoDB, Redis, Qdrant, OpenSearch, Neo4j, MeiliSearch, ClickHouse

AI / ML: LangChain, Hugging Face Transformers, OpenAI API, ONNX Runtime, Tesseract OCR

Cloud / DevOps: Docker, Docker Compose, AWS, DigitalOcean, Railway, GitLab CI/CD, Nginx

Other: REST, GraphQL, gRPC, RabbitMQ, Centrifugo, WebSockets, OAuth2, job queues, system design, observability (Sentry), microservices architecture

EDUCATION

B.Tech in Computer Science & Engineering

NSS College of Engineering, Palakkad | 2019 | CGPA 8.2

Higher Secondary (Class 12)

Sreekrishnapuram Higher Secondary School, Sreekrishnapuram | 2015 | CGPA 9/9

Secondary School (Class 10)

St. Dominic's HSS, Sreekrishnapuram | 2013 | CGPA 10

ADDITIONAL INFORMATION

- Open-source contributor
- Technical writer: a2coder.dev/blog