

Ashwin Raj Tunk

Software Architect | AI Agents & Voice AI | Founder & CEO

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PROFESSIONAL SUMMARY

Software architect and two-time founder who has been building software products since 2020, now Founder & CEO of Neyvo AI. Designs and ships production AI systems end to end: LLM agent harnesses, real-time voice agents, RAG, cloud infrastructure on AWS and Kubernetes, and multi-tenant SaaS platforms. Architected Neyvo's omnichannel platform, which has handled 100,000+ production calls for two institutional customers across 15+ departments. MS in Computer Science (May 2026).

TECHNICAL SKILLS

- **AI & LLMs:** LLM agents, agent harnesses, function calling and tool use, retrieval-augmented generation (RAG), embeddings, vector search (Pinecone, pgvector), prompt engineering, OpenAI, Anthropic Claude, Google Gemini, Meta Llama, OpenAI Realtime speech-to-speech, wav2vec2, Whisper, natural language processing (NLP)
- **Voice AI:** Pipecat, LiveKit Agents, Vapi, Twilio (Voice, Media Streams, AMD), Deepgram, Cartesia, ElevenLabs, Chatterbox (self-hosted TTS), voice activity detection (VAD), echo cancellation, turn detection, voicemail detection
- **Backend:** Python, FastAPI, asyncio, WebSockets, REST APIs, PostgreSQL (row-level security, schema-per-tenant), Supabase, Redis, StackOne (integrations), WorkOS, Stripe
- **Cloud & DevOps:** Amazon Web Services (AWS): EKS, ECS Fargate, Lambda, API Gateway, RDS, S3, SES, SSM Parameter Store, CloudWatch; Kubernetes, Docker, Fly.io, Sentry, OpenTelemetry, Git, GitHub
- **Frontend & Mobile:** React, Next.js, TypeScript, Tailwind CSS, shadcn/ui, Zustand, Flutter, Dart, Firebase
- **Languages:** Python, TypeScript, SQL, Java, C#, C++, Dart

PROFESSIONAL EXPERIENCE

Founder & CEO, Neyvo AI | Bridgeport, CT | Aug 2025 – Present

Problem: Businesses talk to customers across calls, SMS, email, web chat, and WhatsApp, but each channel sits in a separate tool and is handled mostly by hand, causing missed calls, slow follow-ups, and conversation data that never gets analyzed. Most AI voice tools cover one channel, need developers, and report minutes instead of business outcomes.

Solution: Neyvo gives businesses one AI agent that works across every channel 24/7, deploys without engineers, and turns every conversation into decision-grade insight.

- Founded Neyvo AI and lead a 4-person team; took the product from idea to production with two institutional customers across 15+ departments and 100,000+ calls handled.
- Architected the platform end to end: real-time voice agents, SMS and email channels, LLM agent harness, and conversation analytics.
- Built the voice agent runtime on Pipecat and Twilio (streaming STT, LLM, TTS) with sub-800 ms response latency.
- Designed the multi-tenant backend with department-level access control using PostgreSQL row-level security, FastAPI, and Redis.
- Run production infrastructure on AWS and Kubernetes, including scaling, monitoring, and debugging live calls.
- Own product strategy, pricing, go-to-market, and fundraising.

Founder & Director, Tunk Innovations Private Limited | Hyderabad, India | Oct 2023 – Aug 2024

- Founded and ran a software services company recognized by Startup India (DPIIT ID: DIPP159945).
- Delivered 15+ client projects, including full-stack mobile and web applications with Flutter, Firebase, and cloud integration.
- Cut operational costs by 30% through an outsourced delivery model while sustaining a 20% profit margin.

PROJECTS & PUBLICATIONS

Neyvo AI Ops Center: AI Operations Platform | Claude agents, MCP, AWS, Terraform | 2026 – Present

- Built an AI-run operations control plane where 9 scheduled Claude agents investigate production issues, write fixes with regression tests, review PRs, verify fixes, and audit real calls and texts 24/7, with MFA-gated human approval before any merge or deploy.
- Designed the safety layer: an MCP gateway as the agents' only data access (PII masking, per-environment keys, full audit, staging-only writes), a locked main branch, and an approval-gated AWS CodeBuild release pipeline with health checks on every rollout.
- Built monitoring with 5-minute watchers, 28 production CloudWatch alarms, a DynamoDB problem registry, and a Sentry-style dashboard; it has surfaced compliance, reliability, and configuration issues on serverless infrastructure costing a few dollars a month.

Adaptation Layer for Atypical Speech Recognition | Python, Deepgram, OpenAI, FastAPI, Flutter | Dec 2025 – Mar 2026

- Built a personal adaptation layer that improves speech recognition for people with atypical (dysarthric) speech: baseline ASR, then per-speaker vocabulary boosting and learned pronunciation patterns, then LLM semantic repair.
- Evaluated on the UA-Speech dataset across 28 speaker profiles and 1,900+ recordings, with word error rate (WER) tracking, multi-engine comparison (Deepgram, Google Speech-to-Text), and a Flutter app on a FastAPI backend.

UrbanCanteen Food Ordering System | Flutter, Firebase | Mar 2024

- Built a mobile and web ordering app with real-time order management, user authentication, and payment integration.
- Published in IJSREM (ISSN 2582-3930); registered copyright (Diary No. 16299/2024-CO/L).

Cloud-Based Attendance System Using Face Recognition | Python, Cloud | Sep 2023

- Built an automated face-recognition attendance system for 500+ users, cutting manual errors and improving process efficiency by 80%.

TranslateGo: Speech Translation for Regional Dialects | Python, NLP | Sep 2022 – Dec 2022

- Built an NLP application for dialect-level speech translation; selected as a finalist at Smart India Hackathon 2022.

EDUCATION

Master of Science in Computer Science, University of Bridgeport | Bridgeport, CT | May 2026

GPA: 3.66/4.0

Bachelor of Technology in Computer Science (AI & ML), CMR Engineering College | Hyderabad, India | Jun 2024

Certification: C++ and Data Structures, IIT Hyderabad

AWARDS & LEADERSHIP

- Ernest C. Trefz Student Entrepreneur Award, University of Bridgeport (2026)
- Runner-Up, Connecticut Entrepreneur Foundation State Competition (2026)
- Finalist, Smart India Hackathon (2022), Ideastorm at IIT Roorkee, and AICTE YUKTI Startup Challenge
- Vice President, Student Government Association, University of Bridgeport (Jan 2025 – May 2026): chaired monthly Student Senate meetings; previously Senator, School of Engineering, Business & Education (Sep 2024 – Dec 2024)
- Web & Application Development Trainer, CMR Engineering College: trained 1,000+ students in app development and OOP

HOBBIES & INTERESTS

Swimming, volleyball, badminton, Taekwondo (Green Belt), reading about entrepreneurship and technology, spirituality and mindfulness