

# JASON LIVESAY

Senior Software Engineer | AI Agents, Voice Systems, and Applied AI

Mission, Texas | [mindroot.io](https://mindroot.io) | [GitHub](https://github.com/jlivesay) | [Upwork](https://www.upwork.com/freelancers/~jasonlivesay)

## SUMMARY

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**Software engineer with 20+ years of experience and a primary focus on generative AI since 2022.** Builds complete production systems - agent frameworks, low-latency voice agents, browser/computer-use automation, RAG and document pipelines, and multi-tenant AI infrastructure. Strongest in ambiguous projects that require architecture, rapid prototyping, systems integration, optimization, and deployment rather than a thin wrapper around an API.

## TECHNICAL FOCUS

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**AI systems:** agent architecture, tool use, multi-agent delegation, RAG, multimodal models, computer use, evaluation • **Voice and realtime:** direct SIP, streaming STT/TTS, VAD/turn detection, WebSockets, latency and concurrency optimization • **Software and infrastructure:** Python, JavaScript, TypeScript, Node.js, React, Rust, SQL, PostgreSQL, Docker, Linux, cloud/GPU deployment • **Additional background:** data pipelines, trading systems, browser automation, 3D/Three.js, GIS, desktop and full-stack applications

## EXPERIENCE

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**Founder / AI Systems Engineer** | *MindRoot* | Remote **Jun 2025 - Present**

- Created an open-source, plugin-driven AI agent and application platform with customizable interfaces, tool execution, knowledge bases, database access, browser/computer control, supervised workflows, and multi-agent job delegation.
- Designed multi-tenant hosting infrastructure with isolated on-demand agent instances, reverse proxying, WebSocket support, wildcard DNS/TLS, job execution, usage metering, and creator/platform credit accounting.
- Built plugins and reference applications spanning interactive avatars, text-to-speech, image/video generation, long-running workflows, Python/system commands, and Supabase/MySQL integrations.

**Independent AI Engineer** | *Upwork / Direct Clients* | Remote **Nov 2022 - Present**

- Built a self-hosted low-latency voice-agent stack using direct SIP, streaming speech recognition and synthesis, vLLM, open-weight models, tool calling, DTMF, and production monitoring; optimized end-to-end response latency and GPU concurrency.
- Delivered agent and automation systems for commercial real estate, employment verification, healthcare document processing, financial planning, data analysis, education, and interactive video avatars.
- Developed browser/computer-use agents, RAG and knowledge-base systems, document ingestion pipelines, admin dashboards, and complex multi-step workflows with human supervision and external API integrations.
- Upwork Expert-Vetted with 100% Job Success, \$200K+ earned, 5,000+ billed hours, and repeated 5-star engagements.

**Senior Software Engineer / Consultant** | *CKG Solutions and Client Engagements* | Remote / San Diego **2005 - 2022**

- Led backend, full-stack, desktop, and infrastructure work across cryptocurrency trading, television/news production, web auctions, GIS, 3D visualization, document systems, business applications, and automation.
- Designed and operated real-time cryptocurrency data and trading systems integrating multiple exchanges, live market data, execution verification, fault handling, analytics, and evolving automated strategies.
- Built a Three.js/Node.js 3D satellite visualization for a NASA Active Debris Removal program contractor and delivered systems using JavaScript, Node.js, C#, C++, PHP, SQL, OpenGL, and Linux.

## EDUCATION AND PROFESSIONAL PRESENCE

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**University of California, San Diego** - Computer science and general education coursework, 1996-1998 | **Stack Overflow** - 6,300+ reputation, 330 answers | **GitHub** - member since 2010