

CHRISTOPHER INKUM

Software Engineer | Full-Stack TypeScript | Media and Cloud Systems

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PROFILE

Full-stack software engineer and Brown Computer Science student who ships reliable web and media systems from product definition through deployment. Experienced with TypeScript, React, Node.js, SQL, background workers, authentication, payments, storage, testing, and production debugging across Next.js, Vite, Supabase, Netlify, and containerized services. Builds graph-based AI systems, agent execution layers, and evaluation-driven pipelines that improve from reviewed outcomes instead of relying on one-shot model calls.

EXPERIENCE

MuseLabs | Founder's Associate | New York, NY | June 2026 - Present

- Ship full-stack product features across multiple production codebases, working from requirements and data contracts through UI, APIs, persistence, deployment, and verification.
- Built durable media and AI workflows with typed service boundaries, Postgres/Drizzle or Supabase persistence, background workers, retries, health checks, and reviewable failure states.
- Implemented authentication, OAuth, Stripe checkout and webhooks, account-scoped storage, metering, and entitlement flows for customer-facing applications.
- Hardened complex parsing and media pipelines with regression tests, quality gates, structured audit logs, caching, and explicit fallbacks for provider or infrastructure failures.

MuseRoom | Software Engineer and Agentic AI Developer | New York, NY | May 2025 - June 2026

- Developed an AI-powered digital audio workstation spanning a React/TypeScript client, Node.js and Supabase services, and a real-time JUCE/C++ audio engine.
- Embedded an AI co-producer that translated natural-language intent into audio-graph actions; designed demo assets that made real-time model-to-audio interaction understandable.

Outlier | AI Evaluator | San Francisco, CA | May 2024 - May 2025

- Evaluated model responses for accuracy, reasoning quality, safety, and instruction-following; authored difficult prompts across 30+ domains to expose failure modes.

SELECTED PROJECTS

TEDDY - TouchDesigner-Native AI Project Agent | Python, FastAPI, TouchDesigner, OpenAI API, semantic graphs, RAG, WebSockets, JSON Schema, pytest

- Built a native TouchDesigner assistant and semantic graph-planning backend that inspect live operator networks, retrieve official documentation, and produce typed, requirement-traceable operation plans that execute locally only after preview and approval.

Cofheard - AI Script Reader and Rehearsal Platform | React, TypeScript, Supabase, Anthropic, Google Document AI, Inworld, Stripe, Netlify

- Engineered a self-improving script parser that combines PDF text, geometry, OCR, and agentic extraction; reviewed corrections become reusable rules evaluated across subsequent runs.

EDUCATION

Brown University | Sc.B. Candidate, Computer Science and Music | Providence, RI | Expected May 2027

Relevant coursework: Software Engineering; Artificial Intelligence and Machine Learning; Statistical Inference; Accessible and Inclusive Cybersecurity and Privacy.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, SQL, C++, Swift, HTML, CSS

Frontend: React, Next.js, Vite, Tailwind CSS, Zustand, TanStack Query, Three.js, GSAP

Backend and Data: Node.js, Express, FastAPI, Postgres, Drizzle ORM, Supabase, REST APIs, WebSockets, background jobs, object storage

Cloud and Quality: Google Cloud, Netlify, Docker, OAuth, Stripe, Git/GitHub, pytest, Vitest, Playwright, observability and recovery design

AI and Agents: semantic and operational graph engineering, MCP, agent planning and tool execution, self-improving evaluation loops, RAG, model routing, n8n, Anthropic, Gemini, OpenAI, FAL, Inworld