Matthew Broudy

AI and Machine Learning Engineer

New York City Metropolitan Area · matt@wildroot.io · GitHub · Hugging Face

Lifelong tinkerer and Linux user returning to technology to build useful AI systems. Develops machine-learning pipelines and automated publishing grounded in structured data. Works with teams to scope problems, define solutions and guide implementation, drawing on experience in business ownership and client service.

TECHNICAL SKILLS

AI and ML Fine-tuning · Embeddings · Data analysis and evaluation · Semantic search

Development Python · JavaScript / Node.js · REST APIs · MCP · Linux

Systems ONNX · GGUF · Architecture · Systems integration · RAG systems

EXPERIENCE

BrandKit

Oct 2026 - Present

Technical Consultant and Lead Builder

- Partnered with the founder to define product goals, agree on priorities and scope design tasks for an AI-assisted branding product.
- Designed the system architecture and led implementation, translating shared design decisions into workflows for logos, color palettes and typography.

Wildroot

May 2026 - Present

Technical Lead and AI Developer

- Moved Wildroot Social embeddings and classification in-house with EmbeddingGemma-300M fine-tuned on **29,600 labels**. Runs on about 4 older Xeon cores and a few GB of RAM, with **$0 external API spend**.
- On 400 Bluesky test posts, achieved **75.0% intent accuracy vs Jev's 68.5%**; Jev's benchmark API cost was $0.081 per 1,000 posts.
- Replaced hosted email triage in LocalMail with two fine-tuned 33M models running locally in ONNX. Measured 90.2% category accuracy on 489 held-out public emails.
- Led Wildroot Browser delivery across desktop and Android, coordinating identity, mail, social and storage integrations, release testing and a public reference resolver.

Croton.news

Feb 2026 - Present

Developer and Publisher

- Built and operate an independent Croton-on-Hudson news source with 250 published articles, supported by automated ingestion, data scrubbing, OCR and transcription pipelines.
- Implemented custom retrieval-augmented generation (RAG) and sandboxed agents for automated publishing grounded in structured data and source records, with verification and human review.

SELECTED PROJECTS

Stock & Flow — System dynamics modeler: 1,000 example models, AI drafting and MCP. Source code

MCP.vin — Six vehicle-data sources, including NHTSA and EPA; REST APIs and 22 MCP tools. Source code

Phone models — ONNX router: 205 actions; 96.7% top-1 accuracy on 294 held-out requests. GGUF extractor.

EARLIER EXPERIENCE

Fresh Start Computers | Owner and Operator 2011–2015

Generated **over $200,000 in computer sales in the peak year**. Repaired and refurbished computers, built custom laptops and developed Linux distributions for client needs.

Massage therapy — Pursued a client-focused career, including work at The Ritz-Carlton in Tahoe, before relocating to New York. A passion for building useful AI systems motivated a return to technology.