## DANIEL KLIEWER

Al Developer • Full-Stack Technologist • System Designer

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## PROFESSIONAL SUMMARY

Innovative AI developer and system architect specializing in local-first AI solutions, agentic reasoning frameworks, and open-source infrastructure. Expert in building transparent, privacy-focused machine learning systems with extensive experience in data annotation, LLM development, and full-stack application design. Proven track record of creating production-ready AI applications that prioritize user autonomy and data sovereignty.

## **TECHNICAL EXPERTISE**

Al & Machine Learning: Local LLMs (Ollama), LangChain, SmolAgents, ChromaDB, OpenAl

API, Agentic Frameworks, RAG Systems

Programming Languages: Python, TypeScript, JavaScript, SQL

Web Development: React, Next.js, Django, FastAPI, HTML5, CSS3, Tailwind CSS

Databases: SQLite, PostgreSQL, Vector Databases

Data Annotation: Custom labeling systems, JSON/JSONL pipelines, Universal Data Tool

(UDT)

DevOps & Tools: Git, Docker, Netlify, VSCode, Cline, Markdown workflows

Creative Tools: Photoshop, Wacom tablet integration, CRT modulation, video production

## **KEY PROJECTS**

# **GhostWriter - AI-Powered Writing Assistant**

Open-Source Project | 2024

- Developed intelligent writing companion using local LLM integration for content generation and editing assistance
- Implemented privacy-first architecture with local processing to ensure user data sovereignty
- Created modular system supporting various writing domains including blogging, marketing, and technical documentation
- Built with React/Next.js frontend and Python backend for seamless user experience

#### PersonaGen - Advanced Persona-Based Al Framework

System Architect | 2024

- Designed comprehensive JSON schema defining 25 psychological and personality traits for Al persona modeling
- Integrated Reinforcement Learning (RL) and Retrieval-Augmented Generation (RAG) for contextual AI responses
- Developed graph-based orchestration system for complex multi-agent interactions
- Applied system to Reddit data analysis and academic text processing for stylistic assessment

# **Al-Powered Journaling Platform**

Lead Developer | 2024 – Present

- Built full-stack journaling application with real-time psychological analysis using local LLMs
- Implemented SQLite and ChromaDB for efficient data storage and semantic search capabilities
- Created transparent AI feedback system with traceable commentary generation
- Deployed on Netlify with Next.js for optimal performance and scalability

## **Open Deep Research Framework**

Developer | 2025

- Engineered comprehensive research automation system using SmolAgents
- Implemented multi-step data collection, analysis, and synthesis workflows
- Created modular architecture for scalable research operations
- Integrated with local LLM infrastructure for privacy-preserving research capabilities

### Reddit Diss Track Generator - LoCo Hackathon

Organizer & Lead Engineer | February 2025

- Hosted successful local-LLM hackathon promoting AI independence and community collaboration
- Developed agentic framework for Reddit thread scraping and structured data annotation
- Implemented multi-model workflow orchestration for automated content synthesis
- Integrated text-to-speech capabilities for complete audio production pipeline

# **Data Annotation Workflow Systems**

Architect & Developer | 2022 - Present

- Designed custom React/Django annotation platforms for various data modalities (text, image, audio, video)
- Developed JSON/JSONL processing pipelines for large-scale dataset preparation
- Created quality assurance frameworks ensuring consistency and accuracy in labeling
- Built tools supporting ML model training and validation workflows

## PROFESSIONAL EXPERIENCE

# **Independent Al Developer & Consultant**

Austin, TX | 2022 - Present

- Design and develop full-stack AI applications with emphasis on local-first architecture
- Create custom data annotation workflows for machine learning model training
- Build privacy-focused AI tools leveraging local inference capabilities
- Develop open-source frameworks for agentic AI systems and persona-based modeling
- Consult on AI integration strategies for privacy-conscious organizations

# **Map Quality Analyst**

Lionbridge (Remote) | August 2020 - 2024

- Performed large-scale geospatial data annotation and quality assurance for global mapping services
- Utilized proprietary annotation tools to improve location-based service accuracy
- Maintained high accuracy standards across diverse geographic regions and data types
- Collaborated with international teams on data quality improvement initiatives

# **Creative Technology Specialist**

- Developed multiple full-stack web applications including danielkliewer.com, kadaligogh.com, and eastsidechess.org
- Created experimental digital art installations combining traditional media with modern technology
- Produced award-recognized experimental film screened at Austin Film Society Avant Cinema (2012)
- Integrated CRT modulation and custom electronics into fine art installations

## **Inventory Management Specialist**

HEB | Austin, TX | 2024 - 2025

- Managed high-volume retail operations while developing AI tools and applications
- Demonstrated strong multitasking abilities balancing customer service with technical project development
- Transitioned to full-time development focus upon project success

## **EDUCATION & CERTIFICATIONS**

#### **Bachelor of Arts in History**

University of Mary Hardin-Baylor, Belton, TX | 2003 – 2007

#### Continuing Education:

- Advanced AI/ML coursework and certification programs
- Open-source contribution and community leadership
- Local-first AI development methodologies

### **COMMUNITY LEADERSHIP & OPEN SOURCE**

**Founder & Moderator:** r/locollm subreddit - Growing community focused on local-first AI tools and development

**Open Source Contributor:** Active GitHub profile with multiple public repositories **Hackathon Organizer:** LoCo Hackathon series promoting local Al development

Technical Writer: Regular blog posts on AI development, system design, and privacy-focused

technology

# **NOTABLE ACHIEVEMENTS**

- Built production-ready Al applications serving real user needs with privacy-first approach
- Created comprehensive persona modeling framework adopted by other developers
- Successfully organized community hackathons fostering local AI development
- Developed innovative data annotation tools improving ML model training efficiency
- Maintained 4+ years of consistent freelance client relationships and project delivery

## **AVAILABILITY**

Immediately available for full-time positions, consulting engagements, or collaborative projects in AI development, data annotation, or system architecture roles.