# Tim Kellogg

Technology Leader in AI & ML inside large heavily regulated businesses as well as small agile startups. Proven track record of rapid delivery of projects in GenAI, LLMs, embeddings, vector databases, RAG architecture, and knowledge graphs. Passionate about enabling everyone to solve their own problems.

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#### **EXPERIENCE**

#### **Dentropy**, Raleigh — CEO, Cofounder

JULY 2024 - PRESENT

A graph database curated by an AI user experience. It's a mobile app for you to take notes, but the notes are parsed for their structure & meaning. The database (knowledge graph) models & indexes content on the structure & meaning of the content rather than just similarity.

Google Analytics, Google Workspace, DigitalOcean, Python+TypeScript, DSPy, React Native, FastAPI, PostgreSQL, pgvector, Apache AGE, electron.

## **Fancy Robot**, Raleigh — CTO, Cofounder

APRIL 2023 - JULY 2024

I built the product from zero to working product in 1 month and evolved through the onboarding of a diverse set of customers. Six weeks from idea to first customer onboarding. The platform is a highly configurable enterprise LLM chatbot to enable efficient outsourcing of customer implementations & feature requests. I was responsible for product, implementation, outsourcing and sales support.

Managed customer relationships from the technical side. Set project timelines and scopes based on ROI for the customer.

Azure. Python+TypeScript, React, FastAPI, PostgreSQL, OpenAI, Claude, Embeddings, Qdrant, PGVector, terraform, Docker.

# Advata, Seattle/Remote — Director, ML Engineering

Advata  $\rightarrow$  Acclara  $\rightarrow$  R1 (company acquisitions, same role)

JUNE 2021 - JULY 2024 — Acquisition of KenSci

Led two teams distributed across time zones to build the ML platform that supports ML-enabled products in the healthcare space. Grew the organization from 1 to 12 people. Managed customer relationships and milestones. Created alignment behind new business directions. Designed a reorg and provided architectural plans that eased inter-organizational tension. 95% of my time was management.

Led a broad initiative to re-align teams and navigate changing organizational goals through acquisitions. Led another AI initiative to

#### **PATENTS**

10732708 — Disambiguation of virtual reality information using multi-modal data including speech

11232645 — Virtual spaces as a platform

10521946 — Processing speech to drive animations on avatars

#### **OPEN SOURCE**

**FOSSIL** 

https://www.fossil-social.com/ — A social media client (mastodon) that curates posts by their content using AI & ML algorithms. Written in Python.

DURA

https://github.com/tkellogg/dura/ — "auto-save" CLI tool for Git. It uses libgit2 to quietly save your work.
Written in Rust.

MOQ.AUTOMOCKER

https://github.com/moq/Moq. AutoMocker — An IoC container that generates mocks for dependencies. I started this and handed it off to Daniel Cazzulino's moq organization. Written in C#.

**IUMP-LOCATION** 

https://github.com/tkellogg/J

educate company-wide on effective AI usage and safe AI usage within healthcare regulator constraints.

Azure. Python, Databricks, XGBoost, LightGBM, scikit-learn, Kubernetes, Docker, terraform.

#### **KenSci**, Seattle/Remote — Principal Software Engineer

AUGUST 2018 - JUNE 2021

Architect and tech lead for several teams within data engineering, ML engineering, product and customer-facing areas. Created a culture of operational excellence that stabilized a product and delighted customers. Solved problems, wrote code and mentored great engineers.

Led a cross-functional team of data scientists, engineers & medical doctors to improve model explainabilty.

Azure. Python, Databricks, XGBoost, LightGBM, scikit-learn, Kubernetes, Docker, terraform.

### **Amazon Web Services**, Seattle — *Sr. Software Engineer*

MARCH 2015 - JUNE 2018 — Acquisition of 2lemetry

Tech lead within AWS IoT Core, which was the same product we built at 2lemetry. My team ran the Rules Engine, which I built at 2lemetry. I gave an internal talk to thousands of engineers. Filed 2 patents while launching Amazon Sumerian, a virtual reality platform.

### **2lemetry,** Denver — *Sr. Software Engineer*

JUNE 2013 - MARCH 2015

Co-architected an MQTT broker and built a SQL-inspired rules engine in Scala & Akka. The rules engine is still running within AWS IoT Core. Spoke at 8+ conferences & started an IoT (Internet of Things) meetup group.

# **Alteryx**, Boulder, CO — Software Engineer

JANUARY 2012 - MAY 2013

Launched Alteryx' first web-based analytics product, in C++ & C#.

# **KPA**, Lafayette, CO — Software Engineer

AUGUST 2010 - DECEMBER 2012

Internal tech team supporting environmental health & safety consulting.

#### <u>ump-Location</u> — A

PowerShell cmdlet similar to "cd" except that it guesses what you want based on historical behavior. Written in C# & PowerShell.

# Northrop Grumman, Rapid City, SD — $Software\ Development\ Analyst$

JUNE 2008 - AUGUST 2010

**Ensco**, Endicott, NY — Associate Software Engineer

JANUARY 2008 - JUNE 2008

**SIL International,** Chiang Mai, Thailand — *Software Developer Intern* 

JUNE 2007 - DECEMBER 2007

**Houghton College,** Houghton, NY — *Programmer, Student Worker* 

JANUARY 2006 - MAY 2007

#### **EDUCATION**

**Houghton College,** Houghton, NY — BS in Computer Science, BA in Mathematics

MAY 2007