US (open to relocation)
crhenry81@gmail.com

Cole Henry

LinkedIn
GitHub

Full-Stack AI Engineer specializing in production LLM agents, RAG, and development platforms. Currently building production systems with Python backends, React/TypeScript frontends, and LLM infrastructure (LangGraph, Vertex AI).

Work Experience

AI Software Engineer — **Interscope Records (Universal Music Group)** — **Sep 2025–Present**
Dev Team — Santa Monica, CA

- Shipped production LLM agents serving 150+ internal users daily, built on Python backend services (LangGraph / MCP) running on GCP with Vertex AI and GCS-backed pipelines processing large-scale streaming and social data
- Designed and built a RAG knowledge platform that lets LLM agents answer questions from internal docs, cutting manual analytics reporting 50%
- Built an A&R research app that surfaces 100+ new artists weekly through automated pipelines, used by A&R to evaluate signings
- Built a React + TypeScript analytics platform replacing 30+ Tableau dashboards, with embedded AI agents for natural-language data analysis

Analytics Engineer — **Interscope Records (Universal Music Group)** — **Sep 2024–Aug 2025**

- Designed and maintained core data pipelines in Python and BigQuery powering automated executive and international reporting
- Built 15+ Tableau dashboards used by international stakeholders

Backend Developer — **HyperCard AI** — **Nov 2023–Aug 2024**
Cary, NC (Remote)

- Built a natural language -> SOQL service, enabling non-technical users to query Salesforce, reducing tickets by 30%
- Built error logging system processing 10K+ daily events with 99.9% accuracy, improving debugging efficiency

Language & Culture Assistant — **IES Juan Gris Secondary School** — **Oct 2023–Jun 2024**
Madrid, Spain

- Taught 16 sections across English, music, and technology, collaborating with Spanish-speaking teachers

Education

- **B.A. Computer Science, B.S. Statistics & Analytics, Minor Hispanic Studies** — **2019–2023**
  University of North Carolina at Chapel Hill

Technologies and Languages

- Languages: Python, TypeScript, SQL
- Technologies: LangGraph, RAG, Vertex AI, GCP, GCS, BigQuery, LLM agents, embeddings, FastAPI

Projects

Lapwise.dev (GitHub): Full-stack analytics platform built with Next.js, React, FastAPI, and PostgreSQL, modeling 76 seasons of Formula 1 race and telemetry data with interactive visualizations, an AI analyst chatbot and a discussion forum.

- Designed backend APIs and data models supporting scalable historical analytics queries