William MJ Hill

Applied AI Engineering and Technical Leadership

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SUMMARY

Staff-level engineer, technical advisor, and educator with 13 years delivering software across education, healthcare, enterprise SaaS, and federal programs. Builds AI products from stakeholder discovery through deployment, with depth in retrieval, evaluation, data safeguards, and developer education. Current work spans RenderATL technology leadership and institutional AI engagements through /dev/color.

TECHNICAL EXPERTISE

Engineering: Python, TypeScript, Go, SQL; React, Next.js, FastAPI, NestJS; Postgres/pgvector, AWS, Docker

Applied AI: Retrieval-augmented generation, Google ADK, MCP/A2A, tool calling, evaluation, tracing, human review

CURRENT LEADERSHIP AND APPLIED AI WORK

Associate Director of Technology

Oct 2026 - Present

Forward Deployed Engineer

Apr 2026 - Present

RenderATL and Atlanta Tech Week | Atlanta, GA | Contract

Reports to the CEO on engineering, technology operations, workshops, and community programming; concurrent sponsorship sales role.

- Served as sole engineer on a **six-application platform** for a 10,000-attendee conference business, spanning analytics, sponsorship, streaming, annotation, people operations, and gamification. Delivered authenticated playback, ticket entitlement checks, and capacity-aware registration.
- Built AI sales workflows with prospect scoring, policy checks, model-cost limits, and human approval; deployed an agent using MCP for **seven representatives**, with CRM/email context and draft-only email permissions.
- Built and operated a governed AI sales agent that sourced **165 companies**, drove **22.4% engagement**, and supported **$40,000 in signed business**, with outreach behind human-review and policy gates.
- Built an annotation quality layer with gold and honeypot tasks, inter-annotator agreement, trust-tier routing, and model adjudication of contested items.
- Closed **$224,500 across 11 accounts in 15 weeks**, with zero cancellations, while delivering the software. Founded and taught **RenderATL University**, a three-workshop AI engineering series with **164 registrations**.

Lead Technical Fellow

Oct 2025 - Present

/dev/color | Postsecondary AI Initiative | Technical fellowship and engineering engagements

Led interface design for the four-person AASCU team at the November 2026 Higher Endeavor Datathon. Both prototypes used synthetic student records.

- Designed a tool for Adams State directors to compare Pell and non-Pell cohorts and export results. Helped build a planner for Indiana University regional campuses to show how moving a course into summer affects a 30-credit annual target.
- Led a live Purdue Global design sprint at the June 2026 STEPs hackathon. The team turned a stakeholder walkthrough into **deployed UI improvements in under an hour**: lesson resources, voice input/read-aloud, instructor preview, accessibility fixes, and faculty-defined stopping points for AI assistance.
- Co-authored the post-event report. A five-point pulse survey of **three Purdue participants** rose from **1.5 to 4.8** on tool perception and **1.8 to 4.5** on use-case fit.
- Built natural-language-to-SQL tools with server-side checks blocking excluded student-data columns and fail-closed local handling. Designed tutor evaluation with PII redaction, HMAC hashing, human agreement measures, and latency, token, and cost telemetry.

SELECTED AI SYSTEMS

Data for Black Lives research agent: source-cited retrieval across vector and structured data using FastAPI, Next.js, Postgres/pgvector, authenticated WebSockets, and Langfuse tracing. Source

PTSO Agent: deployed Google ADK/MCP/A2A application with six evaluation suites, provenance, policy checks, and refusal behavior. Contract evaluation cut typical response latency from **20 to 40 seconds to about 6 seconds**. Live app

PROFESSIONAL EXPERIENCE

Senior Software Engineer, Interop Platform Nov 2025 - Jul 2026

Zocdoc | Remote

- Built an insurance-translation evaluation path using FHIR data, retrieval across roughly 721 carriers, and approximately 100 ground-truth mappings. Findings informed merged deterministic mapping infrastructure; booking integration remained paused.
- Authored team Claude Code guidelines and six task-oriented recipes. Delivered four merged changes supporting a pediatric provider go-live; fixed appointment-timeout handling by verifying successful creation before reporting failure.

Staff Software Engineer Nov 2022 - Oct 2025

Meroxa | Remote | Promoted from Senior in Apr 2024

- Technical lead for **PushToProd**, an agent-driven platform that provisions infrastructure, manages secrets, and deploys applications from natural language. Led secure LLM proxy, typed schemas, lifecycle validation, retries, and observability.
- Built production Go connectors on Conduit and an HL7-to-FHIR processor. Primary engineer on a Unified Data Library connector delivered under a **$1.2M Air Force Research Laboratory award**; supported discovery, demonstrations, and implementation.

Senior Software Engineer Apr 2020 - Aug 2022

New Relic | Remote

- Co-designed and shipped a Python S3 log-ingestion Lambda with streaming decompression and asynchronous batching; presented it at AWS re:Invent 2020. Led the Logs 2.0 interface redesign and introduced end-to-end tests that reduced UI bugs **40%**.

Software Engineer and Technical Team Lead Jul 2013 - Apr 2020

Lawrence Livermore National Laboratory | Livermore, CA

- Led a distributed international team on the Earth System Grid Federation, an R&D 100 award-winning climate-data platform. Replaced an 8,000-line Bash release process with Python and Ansible, reducing build time and deployment complexity **90%**.
- Helped deliver a secure information-sharing system used by **48 governments**; received NNSA / U.S. Department of Energy Recognition of Excellence as a member of its team.

Technical Advisor and Contract Engineer 2019 - Present

MJ Hill Digital LLC | Selected concurrent engagements

Honey to Cocoa: advised a Techstars-backed founder on skin-tone computer vision, product matching, data validation, and vendor oversight (pro bono). **Mela AI:** advised leadership on AI architecture and built a Mixture-of-Agents proof of concept (pro bono). **Nevados Engineering:** built geospatial and solar-farm scheduling tools, improving schedule-generation runtime **23%**.

SELECTED SPEAKING AND TEACHING

The Tech Academy · Oct 9, 2026 — How Engineers Build Solutions for Real-World Problems. Recording

WeAreDevelopers World Congress North America · Sep 25, 2026 — The Put That Sh*t On Agent: Why AI Agents Need Contracts. Slides

ACM Richard Tapia Celebration · Sep 17, 2026 — Your Brain Trust: How Peer Mentorship Unlocks Harder Technical Problems (panel).

/dev/color · 2026 — Vibe Coding with Guardrails: Rebuilding MajorKey with Claude Code. Recording

OpenTeams Open Source Architects Community · Apr 16, 2026 — Can AI Agents Extend the Half-Life of Open Source Software? A Conduit Case Study. Recording

RenderATL University (2026): founded and taught From Vibe Coding to AI Engineering; authored a 34-document curriculum. Earlier teaching: University of the Virgin Islands, Hackbright Academy, The Hidden Genius Project, and Black Girls Code. More talks and workshops

RESEARCH RECOGNITION

Acknowledged for precursor concepts and proofs of concept in the **ESMBenchmarkViz** paper, Journal of Open Source Software (2026). Paper

EDUCATION

Mississippi State University | M.S., Computer Science, 2013; B.S., Computer Science, 2011