

MICHAEL GALBRAITH PURVIS

Forward Deployed Engineer · Real-Time & Applied-AI Systems
Fort Collins, CO · Open to Remote · (702) 724-6689 · mikegpurvis@gmail.com
linkedin.com/in/michael-purvis · github.com/eibonscroll

SUMMARY

Senior engineer with 20 years building real-time, interactive, and AI-driven systems — from Unreal Engine HMI shipped in production vehicles to live MetaHuman + LLM-agent experiences. I parachute into ambiguous, early-stage problems, integrate messy systems end-to-end, and lead small teams to delivery. Deep C++/Unreal specialist, now fluent in applied agentic AI and high-leverage LLM-assisted development.

CORE SKILLS

- **Languages:** C++, C#, Python, JavaScript / TypeScript, QML, SQL
- **Real-Time & 3D:** Unreal Engine 5 (C++/Blueprint), Pixel Streaming, MetaHuman, shaders/materials, Qt/QML, WebGL
- **Applied AI:** Agentic AI integration, LLM-assisted development, RAG / context systems, computer vision, prompt engineering
- **Integration & Backend:** RPC, REST, GraphQL, Node.js, cloud / agentic backends
- **Leadership:** Team lead & hiring, mentoring, 3rd-party studio delivery, technical direction
- **Tooling:** Git, Perforce, Jira, Visual Studio, CLion

EXPERIENCE

Context Arcana LLC — Founder & Principal Engineer

May 2026 – Present · Remote

Growth for small business through AI-native websites, automation, and AI integration.

- Design and ship AI-native websites and automation pipelines for small-business clients, from architecture through deployment.
- Deliver applied-AI integrations (LLM workflows, content and automation systems) that replace manual work and accelerate client growth.

Founding Engineer — Early-Stage Startups — Pre-Seed

2025 – 2026 · Remote

- **ProdigyLabs.ai (AI-mentor platform):** Built the real-time MetaHuman layer of a platform fusing Unreal Engine Pixel Streaming with a cloud agentic LLM backend — MetaHuman behavior and animation blending, the RPC link between UE and the cloud agent, and Pixel Streaming performance/graphics debugging for live conversational sessions.
- **Grimigeon Games (UE5 studio):** Led gameplay engineering and technical direction as part of founding leadership; set technical pillars and ran engineering hiring.

Mercor Intelligence — Senior Software Engineer (Contract)

Jan 2025 – Aug 2025 · Remote

- Authored prompts and evaluations to train advanced AI models on complex C++/Python software-engineering tasks; built AI developer-productivity tooling.

Canoo — Lead HMI Software Engineer

Nov 2021 – Jan 2025

- Led a 3-engineer UI/HMI team delivering the in-vehicle main touchscreen and dash-display interfaces across 3 vehicle programs.
- Brought Unreal Engine up on the vehicle's **NXP i.MX8** automotive hardware and optimized it from **8–14 fps to a stable 60+ fps** — the key enabler for the production UE-based HMI.
- Owned HMI architecture in C++, Qt/QML, and Unreal Engine (API Gear meta-programming, UE shader/material work); ran hiring, engineering interview panels, mentoring, and internal demos.

Heart Machine — Senior Systems Engineer

Apr 2021 – Nov 2021

- Shipped *Solar Ash* (PS4 / PS5 / PC, Dec 2021): UI and systems programming in Unreal Engine C++ and Blueprints.

Konami Gaming, Inc. — Software Engineer IV → Team Lead

Feb 2017 – Apr 2021 · two tenures

- Managed a team of 5 engineers in Games R&D building and debugging C++ video-slot titles; shipped 5–6 titles as an IC across tenures.
- Managed and trained 3rd-party studios on Konami's development process and hardware, driving their on-platform delivery; ran interviewing, planning, and time budgeting; evaluated and prototyped in Unreal Engine 4.

United Power — Senior Game Programmer / Team Lead

Aug 2018 – Jun 2019

- Led JavaScript game development for a web-based MMO (PlayCanvas, Vue, Apollo/GraphQL, HTML5, WebGL shaders).

Simulation & Game Engineering — Midnight Studios · TecMasters · Alatec

2013 – 2017

- Built a UE4 arcade game, Borderlands-series UI, and Python automation tools; developed C++ modeling-and-simulation applications and refactored legacy C simulators to modern object-oriented C++.

Earlier Experience — Chickasaw Nation Industries · Alatec · Lifetouch · CCP/White Wolf

2006 – 2013

- Led design and development of an intelligent-agent military simulation as Project Lead at Chickasaw Nation Industries (C++, C#/.NET, WPF, MySQL); built wargame/ground-combat simulation tooling (COMBATXI) and office-automation systems; MMO prototype internship at CCP/White Wolf.

EDUCATION & CERTIFICATIONS

- **B.S., Visual & Game Programming** — Art Institute of California, San Francisco (GPA 3.5)
- *Applied Agentic AI for Software Engineers* — Interview Kickstart (2025) · *Computer Vision* — OpenCV (2025)
- U.S. Army — Specialist (E4), Armor Crewmember, Operation Desert Shield/Storm; Honorable Discharge.