Roman Di Domizio

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OVERVIEW

AI product leader specializing in architecting agentic and autonomous systems. Proven ability to translate a product vision into a technical roadmap and lead agile teams from concept to execution. Seeking to apply strong experience in AI strategy and systems architecture to solve complex challenges in the national security and space exploration sectors.

EDUCATION

Master of Science in Artificial Intelligence + Graduate Certificate in Engineering Management
University of Colorado Boulder | Remote | Expected May 2027

Bachelor of Science in Computer Science
University of Colorado Boulder | Boulder, CO | August 2022-May 2025 | GPA: 3.4
ACHA D1 Ice Hockey Player: Dedicated 20+ hours weekly to compete at the ACHA D1 level
Coursework: Startup Essentials, LLMs, Intro to AI, Cognitive Science, Data Science, Software Development, Algorithms

SKILLS

Programming Languages: Python, C++, TypeScript, JavaScript
Artificial Intelligence & Machine Learning:
- *Engineering:* Retrieval-Augmented Generation (LlamaIndex, ChromaDB), LLM API integration, prompt engineering
- *Research & Architecture:* multi-agent systems (LangGraph, CrewAI), reinforcement learning (RLHF), model fine-tuning (LoRA/QLoRA), model observability (LangSmith), constitutional AI (Anthropic)
- *Tools & Platforms:* FastAPI, Streamlit, NeMo Guardrails, OpenRouter, Ollama, Modal, Jupyter
Application Development: React, React Native, Node.js, MongoDB, MySQL, Tailwind, Git, GitHub Actions, Unreal Engine 5
Product & Strategy: Agile (Scrum, Kanban), product roadmapping, technical specification, Notion, Jira, Figma, Miro

EXPERIENCE

AI Product Lead Intern | The Verse | Remote | *March 2025–Present*
- Led the AI initiative for The Verse's therapeutic platform, WalkXR, establishing the product vision for an agentic framework
- Translated the vision into a product roadmap, scaling from a single-agent MVP to a multi-agent OS with fine-tuned LLMs
- Defined the OS strategy, including LangGraph orchestration, RAG, RLHF agent training, and LoRA/QLoRA fine-tuning
- Architected and built an LLM simulation system to generate synthetic data for AI agent training and evaluation
- Prototyped foundational agent architecture using Python (FastAPI, RAG) and drove human testing with Streamlit demos
- Owned the product lifecycle for two Scrum teams (AI/Sim, Platform), managing the backlogs and roadmaps in Notion
- Authored the AI fundraising thesis, translating technical strategy into a compelling investor narrative to support seed funding
- Owned the flagship Unreal Engine 5.3 demo, from initial build to serving as a platform for stakeholder showcase

Co-Founder & Software Engineer | Sugar | Boulder, CO | *September 2024-May 2025* | github.com/romandidomizio/Sugar.git
- Owned the full-stack development of a mobile app using React Native and TypeScript, delivering a user-centric UI/UX
- Architected a scalable and secure backend using Node.js and MongoDB to handle user data and business transactions
- Managed the end-to-end product lifecycle using Agile (Kanban) and Jira to align development with business goals
- Implemented a CI/CD pipeline with GitHub Actions to automate testing and streamline deployments
- Successfully launched an MVP, securing initial user testing and product feedback from local Boulder businesses

Tech Director | HackCU | Boulder, CO | *August 2024-May 2025* | hackcu.org/hackcu11
- Led full-cycle web development for HackCU 11, Colorado's largest collegiate hackathon, with ~190 participants
- Designed and built a custom ski-themed website using Figma, React, TypeScript, and Tailwind
- Ran Scrum with GitHub Actions and Jira, syncing cross-functional updates on schedule for the three-day event
- Mentored successor, handing off CI pipeline, docs, and director duties for HackCU 12

PROJECTS

LLMfeed | Future of Programming: LLMs? | *Spring 2025* | github.com/romandidomizio/LLMfeed.git
- Built an automated AI-content pipeline (Python/Flask) using OpenRouter & prompt engineering for script/visual generation
- Engineered backend multimedia workflows (pydub, MoviePy), automating TTS integration & dynamic video editing

Mancala AI Agent | Introduction to Artificial Intelligence | *Fall 2024* | github.com/lugo7099/Mancala.git
- Developed an AI agent for Mancala in Python, leveraging Minimax and Alpha-Beta Pruning for optimal decision-making
- Designed a heuristic evaluation function and simulation framework that outperforms players with a 97-99% win rate

3D UFO Adventure | Computer Graphics | *Fall 2024* | github.com/romandidomizio/3D-UFO-Adventure.git
- Created a graphically complex 3D cyber-city simulation with UFO navigation using advanced OpenGL techniques and C
- Applied 3D modeling, texturing, blending, and dynamic lighting to create an immersive, user-controlled experience