

# Roman DiDomizio

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## OVERVIEW

Product engineer with a CS background and hands-on experience in agentic AI systems and full-stack development. Skilled in designing LLM pipelines and leading product iterations. Co-founder of a mobile app for sustainable community engagement.

## EDUCATION

### Master of Science in Artificial Intelligence + Graduate Certificate in Engineering Management

University of Colorado Boulder | Remote | Part-Time | 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, Web Design, Data Structures, Algorithms

## SKILLS

**Programming Languages:** Python, C++, TypeScript, JavaScript

**AI & ML Techniques:** Retrieval-Augmented Generation (RAG via LlamaIndex + ChromaDB), multi-agent orchestration, reinforcement learning (RLHF, PPO), LoRA/QLoRA fine-tuning, synthetic-data generation, prompt engineering, model observability

**Frameworks:** LangChain, LangGraph, CrewAI, NeMo Guardrails, Flask, Streamlit, React, React Native, Tailwind, Pandas, Matplotlib

**Platforms & Tools:** LangSmith, Ollama, OpenRouter, Modal, Docker, Git, GitHub Actions, Jupyter, MongoDB, Unreal Engine 5.3

**Product & Team Ops:** Jira, Confluence, Notion, Airtable, Figma, Miro, Agile Methods (Scrum, Kanban, Lean)

## EXPERIENCE

### Product Engineer Intern | The Verse | Remote | March 2025–Present

- Leading AI product development for WalkXR, building an emotionally intelligent, gamified therapeutic platform
- Authored the 0-to-1 AI roadmap, from agent product specs to a full OS with custom models, orchestration, & observability
- Architected and built a novel LLM simulation system, establishing the core data pipeline for AI training & tuning
- Scaled AI development via automated persona simulations, boosting data generation and iteration speed by 500%
- Managing three Agile product workflows with Notion, Kanban, and Miro for AI, simulation, and platform development
- Defining the WalkXR OS technical strategy, including RLHF/PPO agent training, LoRA/QLoRA fine-tuning, and CI/CD
- Prototyping high-EQ agents with LangGraph and RAG via a Flask API, enabling rapid testing with Streamlit UIs
- Owning the flagship UE 5.3 demo, from initial build to its current role as the primary platform for stakeholder demos

### Co-Founder & Software Engineer | Sugar | Boulder, CO | September 2024-May 2025 | [github.com/romandidomizio/Sugar.git](https://github.com/romandidomizio/Sugar.git)

- Led full-stack development of Sugar's mobile app using React Native with Expo and TypeScript for a clean UI/UX
- Architected backend systems with Node.js and MongoDB, focused on scalability and security optimization
- Oversaw Agile (Lean, Kanban) processes with Jira to align technical efforts with product goals
- Established robust CI/CD pipelines via GitHub Actions and Heroku to ensure efficient testing and deployment
- MVP completed and tested with local Boulder businesses as a digital storefront and farmers market alternative

### Tech Director | HackCU | Boulder, CO | August 2024-May 2025 | [hackcu.org/hackcu11](https://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](https://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

### 3D UFO Adventure | Computer Graphics | Fall 2024 | [github.com/romandidomizio/3D-UFO-Adventure.git](https://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

### AI Mancala Player | Introduction to Artificial Intelligence | Fall 2024 | [github.com/lugo7099/Mancala.git](https://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

### A Love Letter to Love Letter | Software Development Methods | Summer 2023 | [github.com/CCoakley6/CSPB3308Group5.git](https://github.com/CCoakley6/CSPB3308Group5.git)

- Developed a full-stack web-based card game using Python, Flask, PostgreSQL, JavaScript, and HTML/CSS
- Collaborated with a team of four using GitHub, Trello, and Agile (Scrum) for development and project management