# Roman DiDomizio

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#### **OVERVIEW**

Tech-focused product manager with a CS background and hands-on experience in AI, full-stack development, and game design. Founder/CTO of a waste prevention & community building app. I bring strong leadership, creative thinking, and technical skills.

#### **EDUCATION**

### Professional Master of Science in Creative Technology and Design

University of Colorado Boulder | Boulder, CO | Graduating May 2027

Track: Video Game Design & Development

### **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

# **SKILLS**

Languages: Python, C/C++, TypeScript, JavaScript, HTML/CSS

**Frameworks & Libraries:** React, React Native, Node.js, Tailwind, Pandas, OpenGL **AI & Systems:** GPT-4, LangChain, LLMs, RAG, Prompt Engineering, Fine-Tuning

Tools & Platforms: Unreal Engine 5, Figma, Miro, Jira, Git, Google Sheets, Apps Script, Agile Methodologies, MongoDB

### **EXPERIENCE**

### AI Product Manager, Simulation & Agent Systems (Internship) | The Verse | Remote | March 2025-Present

- Leading AI system design for WalkXR, an early-stage gamified therapeutic platform for emotional and social learning
- Built a scalable LLM-based simulation pipeline using Sheets, Apps Script, and GPT-4 to test varying 'walks' in WalkXR
- Replaced manual user testing with automated simulations, accelerating iteration speed by over 1000%
- Using simulation outputs to surface design friction and prototype AI agents with GPT-4, LangChain, and RAG
- Aligning agent behavior with simulation insights to support LLM fine-tuning, personalization, and orchestration
- Early solo onboarding project in Unreal Engine 5.3 now serves as the core proof of concept demo for WalkXR

# Co-Founder & Chief Technology Officer (CTO) | Sugar | Boulder, CO | September 2024-Present

- Leading the full-stack development of Sugar's mobile app using React Native with Expo and Typescript, enhancing UI/UX
- Architecting backend systems with Node.js and MongoDB, focusing on scalability and performance optimization
- Driving Agile development processes with Jira to enhance app features and align tech with business objectives
- Establishing robust CI/CD pipelines and security protocols to ensure efficient deployment and data protection
- MVP launching on the IOS App Store summer 2025, with initial adoption from local Boulder businesses confirmed

### Tech Director | HackCU | Boulder, CO | August 2024-Present | Link to HackCU 11 Website

- Led full-cycle web development for HackCU 11, Colorado's largest collegiate hackathon, with 187 participants
- Designed and built a custom ski-themed website using Figma, React, TypeScript, and Tailwind CSS
- Managed a small dev team using Agile, GitHub, and Plane; integrated updates from cross-functional teams
- Mentoring a junior tech team member for transition into the new Tech Director role for HackCU 12

### **PROJECTS**

# **3D UFO Adventure** | Computer Graphics | Fall 2024

- 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

- 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

#### Property Predictor | Data Science with Probability and Statistics | Summer 2024

- Engineered and cleaned a dataset of 500,000+ property records, leveraging Python, Pandas, and Seaborn
- Built and evaluated regression models with Scikit-learn, addressing biases for fair predictive analysis

### **Mountain Hike Planner** | Object-Oriented Analysis and Design | *Spring 2024*

- Designed an interactive Java desktop app for hikers to customize gear selection using JavaFX and Jackson
- Applied Singleton, Factory, Observer, and Strategy patterns, with unit and BDD testing, ensuring 80% code coverage

### A Love Letter to Love Letter | Software Development Methods | Summer 2023

- 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