

Ramon McDargh-Mitchell

Full-Stack Software Engineer & ML Developer

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Education

University of California San Diego (UCSD)

Expected June 2027

B.S. Cognitive Science, Machine Learning & AI Specialization, Minor: Computer Science

GPA: 3.5

Relevant Coursework: Data Structures, Algorithms, Machine Learning, Neural Networks, Statistical Analysis

Technical Skills

Core Technologies: Next.js 15, React 19, TypeScript, Python, C++, Node.js

Backend & Databases: MySQL, Prisma ORM, Sanity CMS, REST APIs, GraphQL

Cloud & DevOps: Vercel, Oracle Cloud, AWS S3, Upstash Redis, Sentry

ML & AI: YOLOv8, OpenCV, OpenAI Whisper, pandas, NumPy, Statistical Analysis

Game Dev & VR: Unreal Engine 5, Virtual Reality Development, HCI, Simulation

Tools & Integrations: Stripe, NextAuth.js, Printful API, Resend API, Git, Docker, CI/CD, Webhook Integration

Professional Experience

Qualcomm Institute at UCSD

Fall 2025 - Present

VR Research Intern

- Developing AI-powered virtual reality avatars using Unreal Engine 5 for educational classrooms and museums
- Contributing to SmartClassroom digital twins and NanoVerseVR for nanoscale exploration and climate change education
- Collaborating with faculty leaders on immersive technology research blending game development, ML, and HCI

Clutch Studio

Spring 2025 - Present

Founder & Full-Stack Developer

- Founded web development company serving real clients with full-stack solutions using Next.js 15, React 19, TypeScript
- Built comprehensive business platforms with admin dashboards, project management, payment processing, real-time data sync
- Deployed production applications with cloud infrastructure, monitoring, and CI/CD pipelines

Key Projects

Digital Revolution - Nonprofit E-commerce Platform

Summer 2025 | [Visit Site](#)

- Built full-stack nonprofit platform using Next.js 15 to expand STEM education access to underprivileged communities
- Implemented e-commerce system with Stripe payments, Printful API fulfillment, NextAuth.js v5 authentication
- Developed donation system (one-time/recurring), order management, webhook handlers, and automated email notifications

Golden Eagle Estates - Business Platform

Spring 2025 | [Visit Site](#)

- Built full-stack business management platform for construction company using Next.js 15 and React 19
- Implemented admin dashboard, project tracking, customer management, and content management systems
- Integrated AWS S3, rate limiting, JWT authentication, and comprehensive project ticket system

Custom YOLOv8 Object Detection Model

Spring 2025 | [View Project](#)

- Trained domain-specific YOLOv8 model achieving 79.4% fitness score on 351 hand-labeled images
- Built complete ML pipeline: video recording, frame extraction, annotation, training, and deployment

Technical Achievements & Leadership

- **VR Research:** Developing immersive educational experiences at prestigious research institute
- **Nonprofit Technology:** Built comprehensive e-commerce platform supporting STEM education with 50% profit allocation
- **Production Deployment:** Deployed multiple production applications with monitoring, error tracking, and CI/CD
- **Payment Integration:** Implemented complex payment flows including subscriptions, webhooks, and order management
- **UCSD Table Tennis:** Key player securing 1st place for JV team, defeating UCLA
- **Varsity Soccer:** Center midfielder developing strategic thinking and leadership; UCSD Club Soccer team-building