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: 3.6
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, Boosting, SVM, Neural Networks, GAMS, PCAS, Pandas, Numpy
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 | *VR Research Intern*   Fall 2025 - Present
- Developing AI-powered virtual reality avatars using Unreal Engine 5 for educational classrooms and museums
- Contributing AI object detection to VR SmartClassroom and NanoVerseVR for guided tutorials and nanoscale exploration
- Collaborating with faculty leaders on immersive technology research blending game development, ML, and HCI

Clutch Studio | *Founder & Full-Stack Developer*   Spring 2025 - Present
- 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 gaining me 3+ clients

In-N-Out Burger | *Food Service*   Spring 2021 - Fall 2025
- Prepared, cooked, and serviced food for customers with exceptional teamwork and customer service

Key Projects

ColorStack @ UCSD - Community Platform   Fall 2025 | *[Visit Site](#)*
- Designed and built first website for 2-year-old chapter serving 50+ Black and Hispanic CS students using Next.js 16, React 19
- Implemented event calendar, member directory, and board structure improving operations and online presence

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 with Stripe payments, Printful API fulfillment, NextAuth.js v5 authentication, donation system

Golden Eagle Estates - Business Platform   Spring 2025 | *[Visit Site](#)*
- Built full-stack business management platform for construction company with admin dashboard and project tracking
- Integrated AWS S3, JWT authentication, rate limiting, and comprehensive customer management system
- Gained 2x more clients from online presence and improved workflow.

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 to detect personal objects

Technical Achievements & Leadership

- **VR Research:** Integrating machine learning into immersive educational experiences at prestigious research institute
- **Nonprofit Technology:** Built comprehensive e-commerce platform supporting STEM education with 50% profit allocation
- **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
- **HSF Scholar:** Was awarded the prestigious HSF Scholar award for my academic excellence
- **Upperclassmen Excellence in Mathematics:** Selected by the mathematics faculty at El Dorado High School during my senior year for my passion and performance in math courses.

Portfolio: [clutchstudio.dev](#) | **GitHub:** [github.com/RamonsArchive](#)