# Ramon McDargh-Mitchell

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## Education

### University of California San Diego (UCSD)

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

Expected June 2027 GPA: 3.5

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

### Technical Skills

Core Technologies: Next. is 15, React 19, TypeScript, Python, Node. is

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 Tools & Practices: Git, Docker, CI/CD, Webhook Integration, Rate Limiting, OAuth

## Professional Experience

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**

#### Relay E-commerce Platform

Spring 2025 | Visit Site

- Built comprehensive e-commerce platform using Next.js 15, React 19, and hybrid database architecture
- Implemented payment processing (Stripe), shipping (EasyPost), tax calculations, and real-time inventory sync
- Developed advanced promo system with usage tracking and flexible discount rules

### 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
- Implemented real-time detection system with confidence threshold optimization and CSV output generation

#### Media Performance Statistical Analysis

Spring 2025 | View Project

- Analyzed 1,040 media observations comparing podcast vs. corporate media growth (2020-2024)
- Built automated data pipelines using Selenium, YouTube API, and Wayback Machine API
- Applied statistical analysis (ANOVA, Cohen's d) revealing significant performance differences (d = -0.646)

## Technical Achievements & Leadership

- Hybrid Database Architecture: Successfully implemented real-time synchronization between Sanity CMS and MySQL
- Production Deployment: Deployed multiple production applications with monitoring, error tracking, and CI/CD
- ML Pipeline Development: Built end-to-end machine learning systems from data collection to deployment
- Client Solutions: Delivered business-critical applications that transformed client operations
- 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

Portfolio: clutchstudio.dev | GitHub: github.com/RamonsArchive