RYAN NI

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EDUCATION

University of California, San Diego   Expected Grad: **June 2026**

B.S. in **Computer Science, Cognitive Science (ML Specialization)**   *Dean's List ('23-'24)*

Relevant Coursework: Battery Energy Storage, Computer Systems & C Programming in Linux   ***3.8 GPA***

PROFESSIONAL EXPERIENCE

Software Engineering Intern (Full Stack)   **Jan 2024 – Sep 2024**

Dream Voyage   *Berkeley, CA*
- Increased user traffic to **35,000+** monthly users by implementing a responsive user interface using React and TypeScript
- Implemented cloud solutions such as **AWS Lambda and RDS** to scale application infrastructure that maintained web application system's uptime at **90%** during production and utilized **Docker containers** for version testing
- Developed the Community Post & Dream Interpretation features on the mobile application- deployed on the App Store

Head STEM Instructor / Curriculum Developer   **Jun 2022 – Apr 2024**

CodeREV Kids / Kids To Pros   *Mountain View | Santa Clara, CA*
- Instructed **700+** students in STEM spanning over robotics utilizing Arduino breadboards and the Arduino IDE to program student-built robots, programming applications, and game design projects
- Restructured **10+** sections of CodeREV Kids and Kids To Pros' curriculums, enhancing student comprehension
- Fostered partnerships with **20+** local businesses, encouraged real-world application/display of **30+** student projects

PROJECTS / LEADERSHIP / OTHER EXPERIENCE

Power Tag / *Kotlin, C++, Google Maps API, Bynk API, GSM, Solar Cells, Arduino, OnShape*   **Oct 2024 – Present**

Software Lead + Hardware Lead   *IEEE FA24 QP*
- Developed solar-powered portable battery with integrated GPS tracking accessible through mobile app made with **Kotlin**
- Integrated **Blynk API** into mobile app to send and receive packets over **GSM communication** from a **SIM800L** module programmed in **C++** with **Arduino UNO** enabling global internet connection without WiFi connection
- Integrated mobile app location feature with embedded map via **Google Maps API** and **Blynk HTTPS API**
- Developed internal electrical architecture integrating **solar power compatibility** and designed 3D prototype in OnShape
- Managed Software and Hardware teams and met **100%** of major deadlines via Agile and Scrum methodologies

TRACE (Technology Repairs and Computer Education)   **Sep 2023 – Jun 2024**

President / Founder   *UC Santa Cruz*
- Founded and led **50+ active members**– providing hands-on experience and education on technology repairment skills- such as replacing phone OLED screens, laptop batteries, and soldering
- Secured **$1,500** in funding towards materials, tools, and education module expansion for more impactful workshops
- Partnered with industry professionals to bring networking opportunities to active members such as Apple

Slug Mommy / *SvelteKit, TypeScript, SupaBase, Tailwind CSS, OpenAI API*   **Jan 2024 – Jan 2024**

Awarded; #1 Best UI / UX   *CruzHacks 2024*
- Integrated **OpenAI API** for personalized virtual assistant to help optimize daily tasks and improve mental well-being
- Designed and developed full-stack web application optimizing daily schedules with task tracking and push notifications

Cal Craft / *React.js, MUI, Python, Firebase, Pandas, YOLOv8, Roboflow, Beautiful Soup*   **Nov 2023 – Nov 2023**

Awarded; #1 Best Empowerment for Minorities   *GraceHacks x ACMHacks 2023*
- Trained a machine learning algorithm **(AP65 IoU)** with **1000+** images scraped from Google and UCSC dining hall menu with **Python Beautiful Soup** to calculate personal insulin intakes via image recognition classification algorithm (**YOLOv8**)

AWARDS / CERTIFICATIONS / SCHOLARSHIPS

#1 Best UI/UX - CruzHacks 2024	**Tau Beta Pi Scholarship** - Engineering Honor Scholarship
#1 Best Empowerment - GraceHacks x ACMHacks 2023	**L1 HPR NAR Certification** - Rocketry
#1 Best Beginner Hack - Wilhacks 2.0	**Inspirit AI Scholar** - AI Research Project

TECHNICAL SKILLS

Languages: TypeScript/JavaScript, C/C++, Java, Python, SQL, Kotlin, Dart

Libraries/Frameworks: React, Next.js, SvelteKit, Material UI, Pandas, PyTorch, Flutter, Zod

Development Tools: Docker, Vercel, AWS, Supabase, Firebase, Google Cloud CLI, Clerk, Roboflow, Git

- Personalized dietary intake-based insulin tracking systems via account set up and image-uploading feature