# CHRISTOPHER REBOLLAR-RAMIREZ

Los Angeles, CA

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#### Education

#### University of California San Diego

La Jolla, California

Bachelor of Science in Mathematics & Computer Science

Expected Graduation, Summer 2025

Bachelor of Science in Cognitive Science with a Specialization in Machine Learning and Neural Computation

# **Relevant Coursework**

- Advanced Data Structures in C++
- Supervised Machine Learning Algorithms
- Practical Data Science with Python
- Algorithm Design & Analysis
- Software Engineering
- Machine Learning in Practice using Python
- Operating Systems Principles
- Computer Organization in C/ARM
- Deep Learning

# **Experience**

 ACM Hack
 La Jolla, California

 Team Lead
 Sept 2024 – Jan 2025

- Developed Swipe Style, a Tinder-inspired web app for browsing fashion items, using MERN Stack and TailwindCSS.
  - Implemented 10 API routes for managing user interactions and integrating Google OAuth for secure authentication.
  - Led a team of **5 members**, organized **weekly meetings**, and delegated tasks to ensure efficient development.

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APF Hospice Inc.
Software Engineer

Upland, California

Jan 2025 – Present

- Redesigned and migrated company website from Wix to a custom Next.js app on Vercel, boosting site discoverability by 25% through faster load times, fully responsive design, and enhanced accessibility.
- Implemented multilingual support with **next-intl**, improving accessibility and **SEO in English and Spanish**, and expanding audience reach.
- Integrated Formspree for streamlined client communication through efficient form handling.
- Collaborated with stakeholders to align technical solutions with organizational mission and community outreach goals.

### **Projects**

### ICE Tracker | Full-Stack Web App

- Built a real-time web app enabling communities to anonymously report and track ICE activity, supporting 500+ active users.
- Engineered a scalable serverless backend with Firebase, Google Maps API, and OpenAI for geolocation, content moderation, and automated pin archival via a scheduled task.
- Developed responsive, interactive UI using **Next.js**, **React Leaflet**, and **Tailwind CSS**, with multilingual internationalization using **next-intl**
- Improved code reliability through comprehensive unit, integration, and E2E testing with Jest and streamlined deployment using automated CI/CD through Vercel and Firebase Hosting.

#### Habitizer | Android App

- Developed Habitizer, a productivity app that lets users build and manage multi-task routines, with real-time tracking via a custom stopwatch feature.
- Built and maintained CI/CD pipelines using Github Actions to automate builds, testing, and deployment, streamlining development workflows.
- Collaborated with a team of 5 in an Agile environment, contributing to sprint planning, feature implementation, and peer code reviews.
- Ensured app stability through unit, integration and UI testing with JUnit and Robolectric.

#### Shakespeare RNN | Deep Learning, NLP

- Achieved record-low test loss of 1.3237 by developing LSTM and RNN models with up to 512-character sequence handling, optimized further with a 300-neuron dual-hidden-layer configuration.
- Enhanced training convergence and text quality using teacher forcing, significantly improving model performance across various temperature settings. Balanced grammar and creativity in text generation to mimic Shakespeare at medium temperatures.

### **Technical Skills**

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

Frameworks & Tools: React.js, Next.js, Node.js, Express.js, Firebase, Flask, AWS, MongoDB, SQL, DynamoDB, TailwindCSS

Developer Tools: Git, Docker, GDB, JDB, Valgrind, GPROF

Certification: PC Core Hardware A+ Cert, PC Operating System A+ Cert

Professional Skills: Communication, Time Management, Teamwork, Critical Thinking