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

APF Hospice Inc. — **Upland, California**
Software Engineer — *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.

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.

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