

Edward New

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EDUCATION

University of California San Diego, San Diego, CA

June 2025

Bachelor of Science, Double Major in Mathematics-Computer Science and Data Science, GPA: 3.91

- Relevant Coursework: Advanced Data Structures and Algorithms, Probabilistic Modeling and Machine Learning, Recommender Systems and Web Mining, Systems for Scalable Analytics, Database Systems, Computer Organization and Systems Programming, Object-Oriented Design, Java and Python Programming

TECHNICAL SKILLS

Programming: Python, Java, TypeScript, JavaScript, HTML/CSS, SQL, C, C#, C++, ARM Assembly

Frameworks: React, Next.js, Astro, Flask, Express, Bootstrap, jQuery

Technologies: Pandas, MongoDB, GSAP, Three.js, Node.js, Firebase, PostgreSQL, Dask, PySpark, Linux/Unix environments, Jekyll, Git/GitHub, Figma

EXPERIENCE

A.S. Graphic Studio, Web Developer, University of California San Diego

Dec 2022–Present

- Spearheading web development initiatives for UC San Diego's undergraduate student government, successfully launching 7+ projects to an online audience of 42,000+ viewers.
- Working collaboratively with a team of 6 designers to transform intricate high-fidelity wireframes into vibrant digital experiences.
- Modernizing legacy systems, migrating from on-premise servers to scalable VPS infrastructure, cutting hosting and maintenance costs while achieving 99.9% uptime and faster CI/CD pipelines.
- Enhancing user experiences by reducing site load speeds by over 95% using modern web technologies and optimization strategies.

Design Co, Web Developer, University of California San Diego

Feb 2024–Jun 2025

- Collaborated with a cross-functional team of 12 designers and developers to translate high-fidelity Figma prototypes into responsive, production-ready websites for UC San Diego's largest pre-professional design organization.
- Launched 4+ major projects supporting 200+ users, enhancing community engagement and platform reach.
- Modernized legacy codebases using Next.js and server-side rendering (SSR), leading refactors that improved site load times by up to 60% and boosted SEO, Lighthouse scores, accessibility, and core web vitals.

Out The Archive, Engineering Manager, University of California San Diego

Sep 2024–Jun 2025

- Led engineering efforts for a creative collective, mentoring 5+ developers, facilitating retrospectives, and promoting inclusive team culture.
- Oversaw architectural decisions to scale platform performance and maintainability during periods of rapid growth.

Data Smith Lab, Software Developer Researcher, University of California San Diego

Sep 2024–Mar 2025

- Led a 3-person team in developing a full-stack survey system (React + GPT API) with custom routing, real-time response collection, and LLM-based labeling, eliminating Qualtrics dependency and reducing manual coding time by 95% for scalable privacy analysis.
- Ran controlled study scenarios and captured behavioral insights around privacy in checkout-free retail, demonstrating technical feasibility across real-world contexts.

Design Lab – ProtoLab, Software Developer Research Intern, University of California San Diego

Jun 2024–Dec 2024

- Designed & developed Revision Support—a full-stack AI-powered peer review assistant—using Next.js, React, TypeScript, and GPT-4, enabling researchers to highlight, annotate, and transform peer feedback into structured to-do lists via a custom Tiptap-based editor.
- Led user research efforts through study design and iterative development to optimize application features for peer review reflection, rebuttal drafting, and to-do list creation.
- Integrated GPT-4 for dynamic scaffolding, helping researchers interpret feedback, draft rebuttals, and organize revisions—later tested in controlled user studies with academic participants.
- Built secure authentication (Lucia/Oslo) & optimized MongoDB schemas to handle complex research data while maintaining performance for large-scale academic workflows.