Andrew Su

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EDUCATION

University of California, Los Angeles

Los Angeles, CA

B.S. Physics, B.S. Computer Science

Sep 2022 - June 2026

- Current GPA: 3.73/4.00, Dean's Honor List (Fall 2024)
- Relevant Coursework: CS: Operating Systems, CS: Digital Design Lab, CS: Data Structures and Algorithms, Computer Organization and Systems Architecture, CS: Logic Systems and Design, Calculus III, Physics: Oscillations and Waves (Honors), Physics: Electrodynamics, Physics: Mathematical Methods for Modern Physics, Physics: Analytic Mechanics, Physics: Quantum Computing (Graduate Level), Physics: Quantum Mechanics I

PROFESSIONAL & RESEARCH EXPERIENCES

UCLA Particle Physics (CMS VR), Department of Physics & Astronomy

Los Angeles, CA

Researcher & Software Engineer - Project Lead

Sep 2023 – Present

- Worked under Distinguished Professor Jay Hauser of the UCLA CMS Experimental Particle Physics Group
- Developed novel VR simulations for particle collision events at the Compact Muon Solenoid (CMS) Experiment at the Large Hadron Collider, granting researchers previously unattainable insight into complex aspects of the collision data, such as the intersections of particle trajectories
- Developed a parser for IG file conversion, ensuring seamless integration with Meta Quest headsets to display particle collider data in a VR setting

UCLA Nuclear Physics, Department of Physics & Astronomy

Los Angeles, CA

Research Assistant

Oct 2023 – Sep 2024 Worked under Professor Huan Huang of the UCLA Experimental Nuclear Physics Group

Conducted advanced analysis using ROOT on data from the Relativistic Heavy Ion Collider at Brookhaven National Lab to study anisotropic flow in relativistic nuclear collisions

Wit Sports Software Engineering Intern New York City, NY

June 2022 - Sep 2022

- Developed an interactive full-stack web application for the New York Islanders, increasing fan participation and leveraging modern frameworks such as Node.js, React, and Express
- Designed and implemented intuitive user interfaces using HTML, CSS, and JavaScript, ensuring a seamless and enjoyable user experience

CLUBS & ASSOCIATIONS

Sigma Pi Sigma Physics Honor Society - President

- Orchestrated membership growth and recruitment initiatives, increasing chapter size by 100% through targeted outreach and value-added offerings
- Instituted a comprehensive academic document archive, peer-to-peer tutoring, and review system, providing significant academic benefits to members
- Liaised with professors to organize student-professor networking events

Sharpe Fellowship

- Chosen as 1 of 10 from over 1000 applicants for the prestigious UCLA Sharpe Fellowship in Economics, based on demonstrated excellence in leadership, academic achievement, and civic engagement.
- Led and won the 2024 annual case competition, conducting an incisive analysis of the 2028 LA Olympics brand partnership opportunities and delivering compelling recommendations before panels of industry experts.

SKILLS & INTERESTS

- Skills: C++/C, C#, Java, Python, ROOT, Unity, QuTip, Git, CMS Computing Tools, NumPy, SciPy
- Interests: Grilling, Crosswords, Brazilian Jiu Jitsu, Tennis, Reading