Stanford



Carlos Valencia

Undergraduate, Mechanical Engineering

Bio

BIO

Born in Camarillo, California, Carlos Valencia learned early that challenges forge resilience. As the son of a hard-working immigrant family, he spent summers working in the avocado and lemon industry. Today, as a Mechanical Engineering student at Stanford University, he channels that determination into robotics.

Carlos has worked on numerous projects related to the field. Carlos's passion for engineering took root in high school. As the former president of the ACHS MESA (Mathematics, Engineering, Science, & Achievement) chapter, he mentored 45+ first-generation students, leading them to compete in national STEM competitions. In the summer of 2024, he worked with L5 Automation, a robotics company based in La Cañada, CA, in Olmos, Peru where he helped develop harvesting platforms for one of the largest agriculture producers in Peru.

Beyond engineering, believes in the power of storytelling to inspire action. His TEDx talk, "Avocados Rot" drew from his upbringing to challenge audiences to seize fleeting chances a message that resonated globally. Recognized as Camarillo Youth of the Year (2023) and awarded the Bronze Volunteer Award by the American Red Cross, he balances innovation with service, whether rebuilding communities after disasters or leading robotics teams.

Carlos's mission is to democratize STEM access. Carlos envisions a world where education erases barriers. He aims to pioneer low-cost robotic solutions for agriculture and healthcare while expanding mentorship networks for first-gen students. When not engineering or volunteering, he unwinds by hiking, playing soccer, or tinkering with 3D printers.