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| **ROMAN SERNA** | |
| RSerna818@gmail.com • (562) 387-3849 • 6475 Atlantic Ave #140 • Long Beach • CA • 90805 | |
| **EDUCATION** | |
| * California State University Long Beach, B.S. Aerospace Engineering (Dean’s List) | |
| * El Camino College, A.S. Engineering | |
| **EXPERIENCE** | |
| **California Launch Vehicle Education Initiative (CALVEIN) — Volunteer** | 09/2014-04/2016 |
| * Baked silica phenolic ablative engine chamber lay-up in a vacuum. * Experience manufacturing tools for nose cone lay-ups and machining supports for structural reinforcement using composites. * Maintained equipment in working conditions and kept work environment organized. * Researched and designed two stage separation system using SolidWorks. * Communicated from design to production rocket system requirements. * Lead in Electronic Ground Support Equipment(EGSE) for launching LOX rocket. * LOX Handling to fuel rocket. | |
| **NASA RASC-AL ROBO-OPS — Robotic Arm Lead Programmer** | 09/2014-12/2015 |
| * Developed control software for robotic arm that accounts for physical and mathematical limitations. * Research and design machine vision and object tracking for payload detection. * Built redundancy into autonomous 5-degree of freedom robotic arm code. * Cooperated in project to effectively manage system design of the robotic arm. * Researched components and materials for development of robotic arm. | |
| **American Institute of Aeronautics and Astronautics (AIAA) — Fundraiser Officer/Member** | 09/2014-12/2015 |
| * Developed and managed a financial account system to track chapter profits. * Build new network opportunities between members and school organizations. * Restructured the office for increase in student attendance. | |
| **Society of Hispanic Professional Engineers (SHPE) — President** | 09/2011-05/2013 |
| * Re-established SHPE Chapter at El Camino College and established STEM events * Motivated and organized the chapter to be independent entity for it to thrive as an engineering chapter. * Initiated outreach between students and faculty on topics of math and science leading to better networking between students and professors. * Facilitated outreach events with the community and STEM students. |  |
| **EXTRA-CURRICULAR ACTIVITIES** | |
| * Northrop Grumman: Shadow an Engineer | 02/2012 |
| * + Learned about preliminary design reviews and of manufacturing of satellites. | |
| * National Institute for Leadership Advancement (NILA) | 08/2011 |
| * Calibrated leadership performance with SHPE professionals.   + Rectify critical networking and time management skills through mentoring | |
| **SKILLS AND COURSES** | |
| * C, C++, AutoCAD, MATLAB, SolidWorks, Word, PowerPoint, and Excel * Aerodynamics, Numerical Methods, Orbital Mechanics, Aircraft Structures(FEA), Propulsion * English and Spanish, Italian, Korean * Lean Six Sigma – White Belt | |