

LUCA T. TRAN

San Luis Obispo, CA • (805) 815-7605 • acul07@gmail.com
LinkedIn • Project Portfolio (see QR code)



EDUCATION

California Polytechnic State University, San Luis Obispo

B.S. Manufacturing Engineering

San Luis Obispo, CA

Expected Graduation: May 2027

- **Relevant Coursework:** Manufacturing Processes, CNC/Manual Machining, CAD/CAM, GD&T, Quality Engineering, Statistical Process Control, Product/Process Development, Packaging & Materials

ENGINEERING EXPERIENCE

SLOMOTOS – Motorcycle Shop

Founder

San Luis Obispo, CA

Summer 2025 – Present

- **Business Development:** Grew SLOMOTOS from a garage-based repair and service business into custom builds and aftermarket part design (sломotos.com).
 - Networking with local riders and sending prototypes to advanced riders for testing, feedback, and promotion.
 - Constantly developing new products, designing product packaging, pursuing a dealer's license to resell custom-built motorcycles, and developing a business plan with cost, pricing, and profit-margin analysis.
- **Product Development:** Use 3D scanning and reverse engineering to model parts in CAD and validate designs with FEA.
 - 3D-printed carbon-fiber magnetic folding license plate brackets.
 - Manually machined axle-mounted crash protection on the lathe and mill, now moving to CNC for larger batches.

Cal Poly Racing

Team Member

San Luis Obispo, CA

Fall 2023 – Present

- **Formula SAE:** Designed a driver heel stop to improve pedal-box ergonomics and integrated it with the brakes subsystem. Also assisted the chassis/aero team with composites manufacturing.
- **Baja SAE:** Helped the chassis team design fixturing in Fusion 360, then cut tubing, machined Delrin mandrels for bending, and fixtured and welded the frame. Also assisted drivetrain in manufacturing a lighter driveshaft.

Luca's Custom Controllers

Founder

Camarillo, CA

Spring 2020 – Spring 2022

- **Business Strategy:** Launched during the pandemic as esports took off, offering highly custom builds with higher margins and lower production costs to compete with larger businesses (x.com/lucascustomz).
- **Builds:** Disassembled, wired, and soldered controllers for button swaps, rear-button installs, and LEDs, then finished each with custom artwork using paint, printed decals, and waterslide decals.

CAL POLY MANUFACTURING PROJECTS

- **Injection Mold Design:** Designed a screwdriver in CAD, programmed CAM toolpaths to CNC-machine its aluminum mold, and injection molded the final parts out of nylon.
- **Fixture Design:** Designed and machined a fixture plate that locates a utility blade handle off its datums, then set it up on a CNC mill to machine the part's second operation.
- **Card Holder:** Learned CAM programming and CNC milling to machine an aluminum base, then designed, laser-cut, and bent a sheet metal stand before powder coating the finished part.
- **Speaker Box:** Laser-cut an acrylic enclosure, calculated bend allowances to form a sheet metal bracket, and soldered the PCB and electronics.
- **Product/Process Development:** Developed a product from concept: set design targets with QFD, defined its functional architecture, and built rapid prototypes before finalizing the product.
- **Prism Project:** Designed a PCB in Eagle, soldered its components, and programmed an Arduino.

WORK EXPERIENCE

In-N-Out Burger

Associate

Arroyo Grande, CA

April 2024 – June 2026

- Advanced to Level 4 associate while attending Cal Poly full time, working to strict quality and safety standards.

SKILLS & INTERESTS

CAD/CAM: SOLIDWORKS, Fusion 360, Siemens NX, Mastercam, Eagle, Arduino

Manufacturing: Manual/CNC Machining, Injection Molding, Sheet Metal Fab, Welding, 3D Printing, Composites

Quality & Analysis: GD&T, Statistical Process Control, JMP, Minitab, Microsoft Excel

Interests: Motorcycles & Restorations, Entrepreneurship, Machining, Weightlifting, Cooking, Videography, Outdoors