

ZITENG (TIGER) ZENG

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EDUCATION

University of Southern California Bachelor of Science Mechanical Engineering (Control and Dynamics); Bachelor of Arts French Honors: Renaissance Scholar Prize Recipient, Magna Cum Laude, Dean's List	Los Angeles, US; Paris, France May 2021-May 2025 GPA: 3.8
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TECHNICAL

- Software: Tia portal, NX, SOLIDWORKS, Mastercam, SIMULINK, FEA, CATIA, C++, MATLAB, SIMULINK, ARDUINO, LABVIEW
- Skills: Diecasting, CNC Machining, 3D Printing, Material Science, Root Cause Investigation
- Languages: Mandarin (Native), English (Native), French (Fluent), German (Work), Cantonese (Conversational)

EXPERIENCE

Georg Fischer Casting Solutions, Automation Specialist/MES Coordinator	August 2025-Present
• Lead daily technical discussion between Chinese, US, and German teams ensuring successful small series production	
• Manage MES workflows and data integration across 12 suppliers for HPDC rear cross-member line (BMW G65/G67), ensuring complete traceability across production, logistics, and quality management	
XDS Bicycles, R&D Engineer	June 2024-August 2024
• Streamlined manufacturing processes for 200k aluminum units/month, improving quality control in an industrial environment	
• Led a 3-member team in sample bike assembly, emphasizing precision and workflow efficiency	
Kuka Robotics, Industrial Designer and R&D Engineer	June 2023-August 2023
• Redesigned assembly instructions for KR50 SCARA robot, enhancing clarity for 100+ technicians	
La Chevrerie de Planvillard, Agriculture Engineer	May 2022-August 2022
• Rebuilt air-cooled two-cylinder engine of Citroen 2CV in remote condition and drove out of barn under its own power	

ENGINEERING PROJECTS

Car Restoration, Engineer and Mechanic	December 2019-Present
• Rapid prototype and 3D print NLA parts for Jaguar and water jetting aluminum seat base designed to 200% factory standard	
• Tear down, machine and rebuild Ford Windsor and Honda D-series engines to factory spec in garage	
Formula SAE, Powertrain Project Lead	March 2023-May 2025
• Spearheaded team of 5 engineers to determine optimal radiator design for sufficient heat rejection of the Yamaha R6 engine	
• Led wiring harness integration and collaborated with electrical team on high-voltage component layout	
Control Laboratory, Engineer	August 2024-May 2025
• System ID of 2 degrees of freedom linear time-invariant system using frequency domain analysis from physical parameters	
• Design and Implementation of P, PD, and PID controllers deploying analytical techniques as well as numerical simulation	
Bipedal Humanoid Robot, Team Leader	March 2023-May 2025
• Optimized robot standing and walking forward and backward (up to 0.5 m/s) using Model Predictive Control (MPC) simulations.	
• Designed Linear Quadratic Regulator for robot joint actuation and simulate in MATLAB Simulink	
Bio-Inspired Morphing Wing, Chief Engineer	March 2023-May 2024
• Spearheaded a 4-member engineering team to design a bio-inspired origami UAV wing actuated Shape Memory Alloys	

LEADERSHIP EXPERIENCE

Mechophtronics Laboratory, Teaching Assistant	August 2023-Present
• Developed DAQ system using LabVIEW to capture real-time sensor data for 35+ student capstone projects	
• Trained 160 students in sensor calibration, signal conditioning, and FEA validation, emphasizing industry standard test protocols	
Pop-Harmonic Orchestra, Cofounder	November 2016-Present
• performed as a street violinist in a quartet across Boulder, and France; Earned up to \$100/h and covering summer expenses.	
• Constructed paper origami violins with 10 terminal pediatric patients at Primary Children's Hospital	