

ZITENG (TIGER) ZENG

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EDUCATION

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

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

Mechoptronics 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