Zhangliang (Leon) LI

Email: leon997116@gmail.com | Tel: 1-3145567992 | Springfield, MA

EDUCATION

Washington University in St Louis **St. Louis, MO**
Master of Science in **Mechanical Engineering** | GPA: **4.0/4.0** Sep 2021-May 2023
Wuhan University of Technology **Wuhan, China**
Bachelor of Science in **Mechanical Engineering** Sep 2021 - Jun 2023
Honors: Second-class Scholarship of 2019-2020; Triple-A Student of 2019-2020

TECHNICAL SKILLS

Programming Language: C++, Java, SolidWorks, CAD, ANSYS, MATLAB
Mechanical Engineer: Material Testing and Analysis, Finite Element Analysis (FEA), Failure Analysis, Corrosion and Wear, Material Processing and Selection, Composite Materials, Product Development, Quality Control

WORK EXPERIENCES

CRRC MA, Springfield, MA, US May 2023-Present
Configuration Engineer

- Manage, review, and maintain all changes to CRRC MA Configuration Management System.
- Responsible for day-to-day activities of the configuration management process, including prioritization and work allocation, ensuring all deliverables are completed on time.
- Develop, maintain, and track compliance with configuration management policies and procedures. Responsible for resolving and escalating any compliance issues as necessary for leadership review.
- Establish and manage the Configuration Control Board (CCB) and facilitate ongoing communication with functional management to enhance configuration management compliance.
- Report vehicle configuration status at each stage and prepare the project's configuration management plan for customer use and approval.

PROJECT EXPERIENCES

Truss Design Robot System Structural Design May 2021-Jul 2021

- Designed a truss robot system with high-speed and high-precision position control using SolidWorks and ANSYS Workbench.
- Performed static finite element analysis to generate cloud diagrams of the truss robot's equivalent stress and displacement.
- Achieved a refined design with a truss robot system that could reach 0.5m/s running speed with positioning accuracy within 0.1mm.

Fluid Dynamics in Covid-19 Mar 2020-May 2020

- Collaborated on a research project to measure the effectiveness of wearing a mask in restricting the spread of COVID-19.
- Analyzed particle motion trajectory using ANSYS platform to measure the effectiveness of wearing a mask in restricting the spread of COVID-19.
- Co-authored a published paper titled "The Effects of Whether Wearing the Mask in the Spreading Process of COVID-19."

PUBLICATION

[1] Junyi Lin, Sharui Zhang, **Zhangliang Li**, *The Effects of Whether Wearing the Mask in the Spreading Process of COVID-19*, Accepted to publish in International Core Journal of Engineering.
https://dx.doi.org/10.6919/ICJE.202012_6(12).0025
[2] Cunzhong Li, **Zhangliang Li**, Haoran Wang, Guorong Zhu, and Huai Wang, M*ulti-objective Optimization of Capacitor Bank Considering the Parasitic Parameters of Capacitors*. 8th Renewable Power Generation Conference (RPG 2019), Shanghai.
IET Digital Library: Multi-objective Optimization of Capacitor Bank Considering the Parasitic Parameters of Capacitors

PATENTS

[1] The Revolute Joints of Industrial Robots (Patent No.: 202020837572.6)
[2] A Balanced Training Platform that Combines Testing and Active-Passive Training (Patent No.: 201921748204.8)
[3] Movement Detection of Patients During Weight Loss Training (Patent No.: 201921748053.6)

ADDITIONAL

Language: Chinese (Native), English (Fluency)