**Zhangliang (Leon) LI**

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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 | GPA: 3.7/4.0 Sep 2021 - Jun 2023

Honors: Second-class Scholarship of 2019-2020; Triple-A Student of 2019-2020

**TECHNICAL SKILLS**

**Design:** SolidWorks, AutoCAD.

**Programming:** MATLAB, C++, Java

**FEA Analysis:** ANSYS, SolidWorks Simulation, MATLAB Simulink.

**Soft Skills:** Teamwork, Management, Problem-Solving.

**Machine Skills:** Casting, Molding, Drilling.

**Management Tools:** Microsoft Excel, Microsoft Project, SAP.

**PROFESSIONAL EXPERIENCES**

**Project Engineer – Configuration Management** Springfield, MA, US

**CRRC MA CORPORATION|** **LA Metro HR4000 Project** May 2023-Present

* As a Project Engineer, I led teams to drive project progress, providing guidance on configuration management, supporting production, and analyzing and resolving technical issues.
* Successfully resolved and coordinated over 1200 project issues, saving nearly $1 million for projects, and reducing project timelines by 2 weeks while maintaining a perfect on-time delivery rate.
* Managed and scheduled production processes conducted risk assessments in advance to meet project requirements, and organized collaboration among various departments to enhance production efficiency.
* Established and managed the Configuration Control Board (CCB), facilitating technical communication with clients, customer technical advisors, and other departments.
* Reviewing and auditing technical documents/drawings.
* Developing an engineering design configuration management platform and tools.
* Implementing configuration management processes for the US market.
* Building, managing, and deploying configuration management processes as templates for all future US projects.
* Manage, review, and maintain all changes to the CRRC MA configuration management system. Report vehicle configuration status at each stage and prepare the project's configuration management plan for customer use and approval.
* Utilize the SAP system to issue and allocate tasks, delineate the scope of production execution, and enhance production efficiency.

**ACADEMIC 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)](https://digital-library.theiet.org/content/conferences/cp764%3Bjsessionid%3D4bbcn9u6xw3n.x-iet-live-01), Shanghai.

[IET Digital Library: Multi-objective Optimization of Capacitor Bank Considering the Parasitic Parameters of Capacitors](https://digital-library.theiet.org/content/conferences/10.1049/cp.2019.0677)

**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)