(623) 465-1313 | zachhoffman7201@gmail.com | LinkedIn

### PROFESSIONAL SUMMARY

Results-driven Mechanical Engineer with hands-on experience designing and analyzing critical systems for high-impact projects in infrastructure. Proven ability to lead cross-functional teams, execute design validation cycles, and deliver reliable solutions under strict deadlines. U.S. citizen with active eligibility for DoD security clearance, committed to advancing national security through technical excellence.

### **EDUCATION**

Grand Canyon University, Phoenix, AZ
Bachelor of Science in Mechanical Engineering — *April 2023* 

- Relevant Coursework: Mechanical Design, Thermodynamics, Solid Mechanics, Fluid Dynamics, Systems Engineering
- Honors: President's Scholarship

## **TECHNICAL SKILLS**

- Mechanical Design & Analysis: SolidWorks (CSWA), AutoCAD, GD&T, Tolerance Analysis, Design for Manufacturability (DFM), Root Cause Analysis
- Simulation & Validation: FEA (basic), Engineering Statics, Structural Load Testing(basic)
- Software Tools: MATLAB, Microsoft Excel (VBA), ProjectWise, Bluebeam, Procore, HTML/CSS (basic)
- Clearance: U.S. Citizen | DoD Security Clearance Eligible
- Soft Skills: Team Leadership, Cross-Functional Collaboration, Agile Project Execution

# **ENGINEERING EXPERIENCE**

WSP USA, Phoenix, AZ Assistant Consultant – Mechanical Systems — *June 2023 – Present* 

- Delivered 3D piping designs for wastewater treatment systems supporting a \$45M infrastructure project; ensured compliance with mechanical codes and inter-discipline constraints.
- Managed a \$1M mechanical engineering scope by coordinating design reviews, tracking milestones, and supporting risk mitigation strategies in field operations.
- Implemented QA/QC protocols using ProjectWise to streamline deliverable reviews and reduce design-change turnaround time by 25%.

Capstone Design Project – Mechanical Lead, Grand Canyon University Sept 2022 – April 2023

- Spearheaded end-to-end design of an autonomous ground vehicle for terrain navigation; integrated motion control, sensor feedback, and mechanical packaging.
- Executed structural analysis and prototype development using SolidWorks and 3D printing; validated structural performance under dynamic load testing.
- Led Agile-style sprints across a 4-member team to meet all technical milestones on schedule and under budget.

## OTHER EXPERIENCE

Troon Country Club, Scottsdale, AZ Operations Associate — Jan 2022 – Oct 2023

- Increased operational throughput by 20% by optimizing guest logistics workflows and redefining shift-task distribution models.
- Mentored and trained five new team members to meet service KPIs and club protocol standards.

Burger King, Phoenix, AZ Assistant Manager / Crew Lead — 2017 – 2021

- Managed 10+ team members per shift; reduced labor inefficiencies by implementing shift balancing techniques during high-volume service periods.
- Trained entry-level employees in SOP adherence and team coordination, supporting store-level performance targets.

## LEADERSHIP EXPERIENCE

Project Lead – Operational Efficiency, WSP USA Sept 2023 – Present

 Developed and deployed a standardized framework for project handoffs that reduced cross-team onboarding time by 30% and improved deliverable traceability.

Team Captain – Capstone Self-Setup Table Project 2022 – 2023

- Orchestrated sprint-based development and technical documentation practices; ensured team accountability through milestone tracking and performance reviews.
- Increased team productivity by fostering a peer-feedback culture and organizing team check-ins aligned with project phase gates.

### **CERTIFICATIONS & AFFILIATIONS**

- SolidWorks Certified Associate (CSWA)
- Member, American Society of Mechanical Engineers (ASME)

#### INTERESTS

Defense Systems Engineering | Robotics & Autonomy | Mechatronic Systems | Tactical Technology | Renewable Energy | Aerospace Prototyping