cort.smith350@gmail.com https://www.linkedin.com/in/cortsmith350/ Portfolio: www.CortSmith.me

#### **EXPERIENCE**

## Design Engineer & Stress Analyst | HLA Engineers Inc. | October 2023 – Current

Specialized in developing and validating structural solutions for diverse client needs in a consulting environment.

- Develop solutions tailored to client specifications, optimizing for performance, cost, and manufacturability.
- Utilize CAD and FEA software tools to model and evaluate mechanical components and systems.
- Post process and analyze results to provide technical expertise and recommendations to clients, enhancing project outcomes and fostering long-term partnerships.
- Collaborate with cross-functional teams to integrate design feedback and refinement throughout the project lifecycle within industry standards and requirements.
- Prepare comprehensive reports and documentation to present results and design decisions to stakeholders.
- Manage confidential drafting and design projects, ensuring adherence to client confidentiality agreements.

# **Helicopter Frame Analysis and Kit Production** | UTA | January 2023 – August 2023

Lead a compact team for analyzing, fabricating, painting, and assembling a Revolution 500 helicopter kit.

- Modeled a weldment frame in SolidWorks and performed structural analysis using ANSYS.
- Identified failure zones and recommended fabrication improvements to enhance structural integrity.
- Ensured compliance with specifications and quality standards through inspections and corrective measures.
- Successfully delivered a fully assembled helicopter, now displayed at Nedderman Hall as a representation of UTA's engineering excellence.

**Contractor** | MPI Construction Inc. | Dallas - Fort Worth Metroplex | April 2016 – June 2023 Contractor in commercial and residential settings specializing in unique custom projects.

- Supervised contract teams in industrial settings, overseeing custom design and construction projects.
- Designed and built custom furniture, framing, and remodeling projects for residential and commercial clients.
- Fabricated custom steel and aluminum structures using ARC and MIG welding techniques.
- Installed, maintained, and repaired custom-built components, including cabinets, appliances, and engines.

## General Manager | Pei Wei Fresh Kitchen LLC | Mar 2004 – Apr 2016

Dedicated General Manager leading teams of staff and management focused on customer's satisfaction, business sales growth, and restaurant operations with annual sales up to \$3.25 million and EBITA up to 32%.

- Managed teams of up to 40 employees, overseeing recruitment, training, and daily operations.
- Directed financial performance, including budgets, payroll, inventory, vendor relations, and profit optimization.
- Implemented process improvements to enhance efficiency, customer satisfaction, and company culture.

#### SKILLS

**Engineering & Design:** 3D CAD (Inventor, SolidWorks) | GD&T | Fabrication | Structural Mechanics | Hand Calculations | Additive Manufacturing

**Simulation & Analysis:** FEA (ANSYS Workbench, APDL) | CFD (Fluent) | Stress & Fatigue Analysis | Thermal & Multiphysics Simulation | Weld Analysis | Modal & Buckling Analysis | Nonlinear Analysis

Software & Tools: ANSYS Suite | Autodesk Inventor | SolidWorks | MATLAB | Microsoft Office Suite

**Leadership & Communication:** People Management | Innovative Presenter | Effective Communicator | Technical Writing | Cross-Functional Collaboration | Project Management

#### **EDUCATION & CERTIFICATIONS**

Master of Business Administration | University of Texas at Arlington | Expected December 2026

**Bachelor of Science in Mechanical Engineering** | *University of Texas at Arlington* | *December 2023* | GPA: 3.44 | Pi Tau Sigma Honors Society & ASME Networking Chair Officer

Associate of Science | Tarrant County College | May 2021 | GPA: 3.54 | Phi Theta Kappa Honors Society

Engineer-In-Training (EIT), Texas | License No: 81076 | Issued June 2024