NAME

LeTourneau University, P.O. Box 7001, Longview, TX 75607 email address phone#

Seeking a career in the field of Engineering. Have experience in design, testing, research, and product development.

EDUCATION:

B.S. in Materials Joining Engineering (date)
Minor in Mathematics
LeTourneau University, Longview, TX
GPA:

PROFILE:

Research and Design:

- Gained firsthand experience in designing weld fixtures capable of hybrid welding.
- Implemented welds of the GMAW and the GTAW combination.
- Gained research experience in Nondestructive Evaluation while designing and programming a sound proof chamber that was capable of recording real time cracking in a weld.
- Additional design projects included a Winrobo device for ASME student design competition. Device was able to clean the outside of a double-hung sash window by remote control.

Vacuum System:

- Severed on a 3 person team that researched, designed, and implemented a vacuum chamber that would saturate sandstone at constant rate. The results were utilized by an energy company needing improved testing methods for detonations used in oil excavating.

Stud Welding:

Research different ways to eliminate liquation cracking during stud welding process.

- Also researched and tested the benefits of stainless steel studs on stainless base versus the steel studs and HPS base currently used for bridges. Results indicated the stainless steel combination would perform as well but have longer life expectancy than current HPS steel combination.

Robotics:

- Served on a 3 person team which designed, built, and programmed a robot that had the capability of six degrees of freedom. Used inverse kinematics to achieve fluent motion by multiple servos running at the same time.

Leadership:

- Served as team lead of a 3 person group which designed and built the frame and braking system for an off-road vehicle that was entered in a competition through SAE Baja. Served on project for two years. Project placed in top 30 out of 100 plus entries. **Senior Design II:** Served as the team lead of a 9 person group which designed and built a hybrid system, FSW and HFI, which allows high strength API steels to be FSW to reduce it susceptibility to stress corrosion cracking in H_2S.

Welding Processes: Hands on experience in metallography, micro and macro hardness testing, SEM analysis, and various welding processes (SMAW, GMAW, GTAW, SAW, Oxyfuel, RSW, FSW, HFIW, Ultrasonic Welding, Atomic Hydrogen, Plasma Welding). Have knowledge of weld preparation, design, and structure.

Communication Skills: Developed sound skills in understanding design, teamwork process, project management, and problem solving. Ample experience in team work and team building by serving on numerous team projects.

Hands-on Experience: Performed arc-welding, flux core welding, oxy-acetylene welding and cutting, experienced with lathe, drill press, and band saw.

Computer Skills: Experience with AutoCAD, Solid Works, Labview, Matlab, Maple, Basic C++, Microsoft Excel, Word, and PowerPoint.

EDUCATIONAL

HIGHLIGHTS:

Member of ASME & AWS
LeTourneau University Transfer Scholarship
Married Student Housing Resident Assistant
Actively involved in Intramural Sports

WORK EXPERIENCE:

Researcher, Materials Joining Lab: *LeTourneau University, Longview, TX (dates)*
Researching the effects of DDC with Inconel 625 filler and 52MSS on a stainless steel plate. Gained knowledge on how to use the Gleeble, arc specialties welder, how to work with local machine shops, different NDE methods, and how to work with long distance co-workers.

Grader: *LeTourneau University, Longview, TX (dates)*
Served as a grader for a Machine Design course. Gained experience in meeting deadlines, multitasking, and helping underclassmen understand how to work through problems they missed.