

Richard D. Lehner

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OBJECTIVE

I am a team oriented person looking for the opportunity to work for SpaceX in the fall of 2018. I'm patient and enjoy challenges.

EDUCATION

Georgia Institute of Technology

- Bachelor of Science in Mechanical Engineering - Graduated Magna Cum Laude
- Captain of Varsity Swim & Dive Team & Vice President of Student Athlete Advisory Board
- Two-time Collegiate Scholastic All American, two-time ACC Academic Honor Roll

Atlanta, Georgia
Graduated August 2017
(GPA 3.41)

EXPERIENCE

Space Exploration Technologies Corp – Maintenance Engineer

- Inspected, installed, and rebuilt mechanical equipment for hydraulic and cryogenic systems
- Responded to GSE issues by identifying the problem, understanding requirements, developing LOTO procedures for high pressure systems, and communicating solutions - sometimes working with and/or leading technicians in the field.
- Researched requirements, wrote and verified procedures, and hired contractors for NDT and re-inspection of pressure vessels
- Verified redesign and ordered hydraulic cylinder for the Stage 1 Shipping Fixture
- Began organizing preventative maintenance schedule/procedure for silicone vacuum pump used in densification of LOX
- Created, organized, and recorded assets and failure codes in Warp Drive to allow for more efficient work in the future

McGregor, Texas
Spring 2017

McKenney's Inc. – Energy Services, Commissioning, and Warranty

Full Time - August 2017 - Present

- Managed Commissioning and Warranty of HVAC on newly constructed commercial buildings
- Improved current commissioning methods by creating an online/working version of the schedule, estimate, and test scripts
- Set up remote connections and used building controls to diagnose problems remotely
- Developed an Internet Of Things tool that measures temp and humidity in real time
- Experimented a new product that decreases chlorine costs in large water systems by ~ 40%
- Created visualizations of business health and KPIs in Tableau

Atlanta, Georgia

Intern - Summer 2015, Summer 2016, & Fall 2016

- Used learned knowledge of HVAC to diagnose building problems based on trend data
- Used blueprints and technical drawings to identify wasted energy and communicate those areas to technicians
- Developed an understanding for Building Controls and used/developed excel macros to easily comprehend new data
- Part of a team that developed a new way for building advisors to understand their equipment failure plan
- Part of a team that developed a program that uses internet scraping and parsing to download data points automatically into excel
- Did building envelope analysis for prospect buildings in Atlanta to estimate utility savings
- Participated in multiple meetings with customers that were working with a multi-million dollar budget

Fluid Dynamics of Defecation – Published Georgia Tech Undergraduate Researcher

- Built multiple devices to create ways to observe radial progression of feces under pressure
- Trained on how to handle Biohazards
- Found viscosity could be calculated by rearranging Reynolds number instead of using rheometry
- Compared 40+ animals to form relationships in fecal viscosity based on their diet and size

Atlanta, Georgia
Summer & Fall 2014

COURSE PROJECTS

Senior Design

- Led a team of six students to design and built foot sensors on a mat that measures the balance of the user
- Played a integral role in developing the electrical circuit
- Continued project with sponsor to patent and enhance the design

Creative Decisions and Design

- Our team of four designed and built an automated robot that performed certain tasks in a restricted amount of time
- Finished 3rd in a tournament against 24 other teams
- Wrote reports and learned techniques for design

Heat Transfer

- Developed a model in MATLAB predicting the temperature of a cylinder made of silicon carbide when exposed to a solar flux
- Our team of four took a finite differencing approach to solving for the temperature distribution within the cylinder
- Wrote a report of our findings and how we came to our conclusion

SKILLS

Instrumentation: Lathes, Milling Machines, Drill Press, Band Saws, Dremels, Soldering, Planers, Oscilloscope, 3D Printer

Software: MATLAB, AutoCAD, Inventor, SolidWorks, Labview (novice), Google Script (Javascript), C/C++ (Arduino)

ATHLETICS

NCAA Division 1 Athlete, Georgia Tech Men's Varsity Swim Team

August 2012 – Summer 2016

- Qualified and competed in the 2012 & 2016 US Olympic Trials; Team Record holder - 400 Medley Relay
- Leadership Council, Representative on the Student Athlete Advisory Board
- Part of a highly competitive team training 20 hours a week. Developed skills in teamwork, leadership, communication, discipline, dedication, and attention to detail.