

Richard D. Lehner

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OBJECTIVE

I am looking to work with a group of motivated individuals that are designing and building technology to improve humanity's future. I enjoy challenges, am not afraid to get my hands dirty, and work with a positive attitude.

EDUCATION

Georgia Institute of Technology

- Bachelor of Science in Mechanical Engineering - Graduated Magna Cum Laude
- Lead Varsity Swim & Dive Team as Captain to highest placement in the ACC in the past 6 years
- Lead community service events as Vice President of Student Athlete Advisory Board
- Two-time Collegiate Scholastic All American Athlete, two-time ACC Academic Honor Roll

Atlanta, Georgia
Graduated August 2017
(GPA 3.41)

EXPERIENCE

Space Exploration Technologies Corp – Maintenance Engineering Intern

- Conducted tests and checkouts, installed, and rebuilt equipment for hydraulic and cryogenic systems
- Responded to ground hardware issues by troubleshooting, identifying the problem, understanding requirements, developing Lock Out Tag Out procedures, and communicating solutions (sometimes leading technicians in the field)
- Researched requirements, wrote procedures, and hired contractors for Non-Destructive Testing/ re-inspection of pressure vessels
- Verified redesign and procured hydraulic cylinder for the Stage 1 Shipping Fixture.
- Organized preventative maintenance schedule/procedure for silicone vacuum pump used in densification of LOX
- Allowed for efficient future work by creating, organizing, and recording assets and failure codes in database

McGregor, Texas
Jan - May 2017

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

- Managed Commissioning/Warranty of HVAC systems on newly constructed buildings
- Created an artificial intelligence program that detects anomalies from sensor data using an iterative K-Means clustering algorithm
- Set up remote connections using hardware, used building controls to diagnose problems, and communicated results
- Created visualizations that represent company health, allowing for better business decisions
- Made current commissioning methods more efficient and developed training schedules for different departments and my own.
- 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
- Team member that developed a new way for building advisors to understand their equipment failure plan
- Team member 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

Atlanta, Georgia
May 2015 - Present

Aegle BioTech – Lead Mechanical Engineer

- We have initiated product sales; filing for provisional patent
- Consulted for our sponsor, helped start the company, recruited, and designed and built the next prototype
- I led a team of six students to design and build the original device that measures standing balance of the user to improve health
- Interpreted customer wants, estimated what was realistic in 9 weeks, detailed design and specs, and procured parts

Atlanta, Georgia
May 2017 – Present

Fluid Dynamics of Defecation – Published Georgia Tech Undergraduate Researcher

- Trained on how to handle Level 2 Biohazards
- Designed and built multiple constructs to create ways to observe radial progression of feces under pressure
- Found viscosity could be calculated by rearranging Reynolds number instead of using rheometry
- Formed relationships in fecal viscosity based on 40+ animal's diet and size

Atlanta, Georgia
May - December 2014

PROJECTS

Arduino - Measuring Temperature and Humidity – Ultrasonic Sensors

- Built a device that measures distance using an Arduino and an ultrasonic sensor. Results are output to an LCD screen
- Built a device that measures temperature and humidity using an Arduino, and compares it to weather data from an API. Results are cycled on an LCD screen and are recorded on a database.

Fall 2017

Creative Decisions and Design

- Our team of four designed and built an automated robot that overcame obstacles in a restricted time limit
- Wrote reports on processes and design decisions.

Summer 2015

Heat Transfer

- Developed a model in MATLAB predicting the temperature of a cylinder when exposed to a solar flux
- Wrote a report of our findings and how we came to our conclusion

Spring 2016

SKILLS

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

Fluid Dynamics: Viscous Flow, Bernoulli Equation, Control Volumes, Laminar and Turbulent Flow

Software: MatLab, AutoCAD, Inventor, SolidWorks, Labview (novice), Google Script (Javascript), C/C++, Python, VBA

ATHLETICS

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

- Qualified and competed in the 2012 & 2016 US Olympic Trials
- Part of a highly competitive team training 20 hours a week while balancing coursework. I developed skills in teamwork, leadership, delayed gratification, communication, discipline, dedication, and attention to detail.

August 2012 – Summer 2016