**Richard D. Lehner**

[rlehner3@gatech.edu](mailto:rlehner3@gatech.edu) • http://rlehner3.github.io • (404) 520-2930

|  |
| --- |
| **OBJECTIVE** |
| I am a fast learner and team oriented person who is interested in working with motivated people. I enjoy being organized, having multiple projects, and I am not afraid to get my hands dirty. I challenge myself to be the hardest worker on a team and smile every day. |
| **EDUCATION Georgia Institute of Technology Atlanta, Georgia** |
| * Bachelor of Science in Mechanical Engineering Expected Graduation: August 2017 * Captain of Varsity Swim & Dive Team (GPA 3.38) * Vice President of Student Athlete Advisory Board * Faculty Honors (2013) and Dean’s List * 2 time Collegiate Scholar All American, 2 time ACC Academic Honor Roll |
| **EXPERIENCE** |
| **Space Exploration Technologies Corp. Maintenance Engineering Intern**  **McGregor, Texas** |
| * Inspected, Installed, and Rebuilt Mechanical Equipment for Hydraulic and Cryogenic Systems *Spring 2017* * Responded to issues with GSE by troubleshooting, writing LOTOs, and communicating solutions * Added, Organized, and Improved Assets in Data Base * Verified redesign and ordered Hydraulic Cylinder for the Stage 1 Shipping Fixture * Researched, Reached out, and hired contactors for NDT and re-inspection of pressure vessels at SpaceX |
| **McKenney’s Incorporated Energy Services and Commissioning Intern** **Atlanta, Georgia** |
| * Did building envelope analysis for prospect buildings in Atlanta to estimate utility savings *Summer 2015 & 2016* * Used learned knowledge of HVAC to diagnose building problems based on trend data Fall 2016 * Used blueprints and technical drawings to identify areas wasting 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 * Participated in multiple meetings with customers that were working with a multimillion dollar budget |
| **RESEARCH & COURSE PROJECTS Atlanta, Georgia** |
| **Undergraduate Researcher** |
| * Butterflies Drafting to Oscillating Airflow Fall 2015   + Observed butterflies react to 12 different oscillating airflows measuring their amplitude and frequency   + Found 87% of butterflies flying in an air oscillation above 20Hz changed their flight pattern * Fluid Mechanics of the Flying Fish Spring 2015   + Studied how the Flying Fish and Basilisk Lizard leap from the water’s surface without much momentum   + Worked with a team to design and build a device that monitors changes in motor torque at different water depths * Fluid Dynamics of Defecation Summer & Fall 2014   + Built multiple devices to create ways to safely observe radial progression of feces under pressure   + Found viscosity could be calculated by rearranging Reynolds number instead of using rheometry |
| **Creative Decisions and Design** |
| * Our team of four finished 3rd (out of 24) to design and build an automated robot that performed tasks in a restricted amount of time |
| **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 |
| **SKILLS** |
| **Instrumentation**: Lathes, Milling Machines, Drill Presses, Saws, Soldering, 3D Printer, Various Mechanical Tools, Forklift, Crane  **Material:** Phase Diagrams, Manufacturing Processes, Stress and Strain, Electrical Properties, T-S Diagrams  **Fluid Dynamics:** Common concepts involved in industrial ductwork or piping  **Software:** MATLAB, Python, Auto CAD, Inventor, SolidWorks (Novice), Microsoft Office, VLAB, Labview (novice), NX |
| **ATHLETICS** |
| **NCAA Division 1 Athlete,** *Georgia Tech Men’s Varsity Swim Team*August 2012 – Summer 2016   * Qualified for Olympic Trials 2016 & 2012, ACC championships 4 years, & NCAA championships 2 times * Leadership Council (2014-2015), Representative on the Student Athlete Advisory Board (2013-2016) * Part of a highly competitive team training 20 hours a week. Developed skills in teamwork, leadership, communication, discipline, dedication, and attention to detail. * Honors: 2014 Most Improved, Team Record 400 Medley Relay, HS State Record, HS Team Captain and State Champion |