

Bryce Rothhammer

rothhammer.b@gmail.com | 214-460-4451 | Austin, Texas

<https://github.com/brothhammer> | <https://www.linkedin.com/in/bryce-rothhammer>

Engineer professional with experience in mechanical design, process design, and root cause analysis. Seeking a career transition opportunity in web development. I am comfortable in vanilla Javascript, HTML5, CSS3, JQuery, Bootstrap, Node Js, MySQL, MongoDB, Express, Heroku and ReactJS.

Education

UT Coding Bootcamp - Javascript Full Stack Web Development, July 2017 - January 2018

Bachelor of Science, Mechanical Engineering, May 2009
The University of Texas at Austin

Experience

07/2017 - Present

Full Stack Web Development at UT Austin

- Endurance Athlete Calorie Calculator
 - A tool to help endurance athletes gauge how many calories are needed to replace what was used during exercise and what macro nutrients those calories should consist of.
 - I was the lead developer of a group of three contributors to this full stack application that uses MySQL, Sequelize, Node.js, Express.js, Bootstrap and Pure CSS, jQuery, Chart.js and is deployed on Heroku
 - <https://endurancecalories.herokuapp.com/>
- Snapshot
 - This app provides a “snapshot” of the area entered by the user. It uses Google maps API, places API and geocode to return a traffic map centered on the address, streetview image and images from the surrounding city. I was responsible for the Google API integration.
 - <https://brothhammer.github.io/Snapshot/>

08/2015 – Present

Engineer Consultant, Stone AeroSPACE

- Design, model, order and install mechanical parts for autonomous submarines
- Use SolidWorks flow simulation to verify fairing design and thrust specification on Sunfish AUV
- Contact vendors of specialized equipment to understand capabilities, arrange testing and eventually procurement for inclusion onboard an AUV
- Develop elevator planes using Solidworks flow simulations package for AUV to reduce attitude thruster use resulting in increased range
- Develop thermal models to inform the future design and testing of laser powered ice probes

06/2014 - 06/2015

Engineer, Silicon Audio

- Managed production of optical seismometer
- Designed work cells, procedures and tolerances to manufacture more sensitive optical seismometer
- Implemented batch production based on Lean concepts for the optical seismometer
- Performed, partially automated and evaluated sensor function tests to verify product quality
- Took measurements with LabView on each sensor and maintained information in MySQL database for further evaluation
- Worked with vendors for part sourcing
- Assembled and maintained customer product evaluation units

01/2011 - 06/2014

Equipment Innovation Engineer, Samsung Austin Semiconductor

- Relied upon by executives and management to produce and communicate reports sharing the fab Key Performance Index (KPI)'s to review factory performance and make decisions.
- Led the Diffusion Value Creation Team, a multi-department effort that developed and executed improvements to reduce manual intervention of tool processes from 13% down to 2% resulting in decreased risk and increased throughput
- Analyze average time between equipment failures, create reports and present findings for all 10 departments and management on a periodic basis so that poor performing tools can easily be identified. Work with engineers and technicians to create actionable solutions with timelines, prioritize action items, help to track and drive them to completion.
- Retrieve data through multiple Samsung systems and SQL queries to intelligently analyze specific KPI's. Organize and investigate data in a manner which brought unseen issues to light and allowed better understanding of Stop Loss, Non Stop, MTBI and other KPI performance.

Bryce Rothhammer | 214-460-4451 | rothhammer.b@gmail.com

- 06/2009 – 12/2010 **Mechanical Engineer, ExelTech**
- Designed NEMA 4X enclosures for single solar panel power inverter and its communication device
 - Modeled, virtually assembled, procured and tested prototype part revisions to improve ease of assembly and function of existing 1KW rack system and MX inverters
 - Performed necessary mechanical tests for UL certification on enclosures
 - Designed cages for new 2KW inverter stack rack systems
 - Created and updated mechanical tool use specifications
 - Calibrated and instructed on the use of mechanical tools for the factory
 - Machined custom bus bars, front plates, back planes etc. when required
 - Used solid modeling software to create component and assembly drawings of custom stack rack systems to customers for purchase consideration
- 06/2008 – 08/2008 **Manufacturing Intern, Dell**
- Provided tighter metric for build area resulting in better understanding of build capacity
 - Increased processing speed of factory commit model in MS Excel via macro programming
- 10/2006 – 10/2007 **Engineering Technical Aide, City of Austin Water Utility Systems Planning**
- Calculated hydraulic grade line values used to determine fire flow pressure
 - Added water features to the Arc-Map database
- 05/2006 – 08/2006 **Early Identification Intern, General Electric Energy Gasification**
- Modeled pre-forging shapes for feed injector tips of different gasification applications