Jennifer Mitchell

Research and Development Engineer

Mullica Hill, NJ - Email me on Indeed: indeed.com/r/Jennifer-Mitchell/d57a2f2daba400f9

Authorized to work in the US for any employer

WORK EXPERIENCE

Product Development Engineer

Henry Troemner LLC - Thorofare, NJ - November 2015 to Present

Company Profile: Leading supplier of precision weights and mass calibration standard as well as a full line of reliable, high quality laboratory equipment products. http://www.troemner.com/

• Lead multifaceted team - engineering, purchasing, marketing, and manufacturing - to launch new line of block heater units.
• Responsible for engineering activities including: DFMEA, 3D design (SolidWorks), prototyping, design verification and validation to meet performance and safety standards (NRTL), and development of product assembly and test protocols (to verify quality) prior to distribution.
• Supply part models and drawings for quote to vendors/suppliers and participate in production part inspections (FAI) and approval.
• Maintain project budget, bill of materials, and timeline to meet company and customer expectations.
• Adhere to company quality and environmental standards: ISO 9001, 13485, 14001.

Co-Owner/Consultant

Cerise Technologies, LLC - Mullica Hill, NJ - August 2011 to Present

Company Profile: Engineering consulting company providing product design, prototype development, and testing support. http://cerisetechnologies.com/
• Characterized performance of a tidal water hydrokinetic system in ocean currents.
• Assisted in DOE grant proposal crafting and submission for hydrokinetic system.
• Advised prototype development strategies for a range of client specific applications (e.g. low impact/portable exercise platform, smart shunt for normal pressure hydrocephalus, improved hemodialysis needle).

Research & Development Engineer

FocalCool LLC - Mullica Hill, NJ - September 2008 to April 2015

Company Profile: medical device research and Development Company with localized therapeutic hypothermia platform technology for treatment of stroke, heart attack, gastrointestinal cancers. http://www.focalcool.com/
• Generated $479K in funding to advance technology development through co-written grant proposals.
• Co-authored 3 peer reviewed journal publications and annual conference abstracts presenting company research and development.
• Innovated new product ideas using engineering principles and 3D modeling software (SolidWorks).
• Helped facilitate new intellectual property (2 patents and one application) by crafting provisional and regular patent applications and addressing patent office actions.
• Characterized in vitro (bench top) cooling performance of 50+ device prototypes by developing test protocols and test plans, designing and fabricating test setups, calibrating and troubleshooting sensors (temperature probes, flow meters, pressure sensors), and collecting data (Labview).
• Orchestrated device in vivo testing for 30+ animals (swine and canine models) by developing device operation protocols, coordinating animal facility and team activities, and executing testing.

• Lead data post processing and analysis using custom developed Matlab scripts and MS Excel.
• Participated in prototype design selection based on analyzed data and stockholder inputs.
• Managed and mentored interns (1-3 undergraduate or graduate level students).
• Met company project deliverables by developing project timelines, tasks, resource allocations, budgets, and milestones using project Gants.

Research Assistant

University of Delaware - Newark, DE - December 2006 to August 2008

Thesis Goal: Characterize macromolecular diffusion in normal and enzymatically treated articular cartilage.
• Designed ex vivo experiments and test fixtures to measure cartilage fluid-mechanical properties.
• Independently performed all sample preparation and testing: small animal dissection, diffusion measurement using confocal microscopy, tissue fixation, cryosectioning, and histological staining.
• Post processed and analyzed experimental data to empirically quantify diffusion and strain properties.

Mechanical Engineer

Army Research Laboratory, APG, Maryland - July 2004 to August 2006

Research Team Mission: Improve soldier safety through advanced assessments of in-field vehicle survivability.
• Developed vehicle specific fault trees used to assess survivability/vulnerability to enemy threats.
• Executed drop table testing experiments for assessing blast and shock failure to electronic circuit boards.
• Developed methodologies for determining ballistic shock damage to vehicle components.

EDUCATION

Master's of Science in Mechanical Engineering

University of Delaware - Newark, DE
January 2009

Bachelor's of Science in Mechanical Engineering

Rowan University - Glassboro, NJ
May 2002

LINKS

http://www.linkedin.com/in/jennemitchell