Jason Savery

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Mechanical Design Engineer

Product Design – Project Engineer

Vehicle – Aerospace

Mechanical Design engineer experienced in component and system design including concept, prototyping, fabrication, production and support. Experience working with multidisciplinary teams to deliver complete hardware solutions. Uses critical thinking and analytical skills to fully understand problems to solve them. Hands on maker comfortable in prototyping and fabrication using machine and hand tools to fabricate parts. Strong communication skills used to work with other engineers, fabricators, and vendors to deliver product on time and made to specifications.

SKILLS

Software: 2D/3D Modeling CAD, Solidworks, Creo Elements/Pro (Pro/ENGINEER), XFOIL, Python, MATLAB, MATHCAD, LabVIEW, Excel, Linux, Github

Equipment: Multimeters, Oscilloscopes, Soldering, 3D printers, Hand and Power tools, Mill, Lathe, Band saw, MIG Welders

Design Experience: Prototyping, Sheet metal fabrication, Welding, CNC machining, Wiring harness, Interconnect, 3d printed plastics, Mechanical and Electromechanical assemblies, Aerospace vehicle system design GD&T, Bill of Materials, DFM, DFA, PDM, FEA

EXPERIENCE

Essess Inc. Boston MA Nov. 2014 – Jul. 2016

Electromechanical Design Engineer

- Designed, prototyped and implemented mechanical parts for sensors and electromechanical components to vehicle roof for drive by thermal data acquisition
- Built and maintained complete library of parts using Solidworks.
- Reverse engineered multiple components of previous designs
- Parts created using a combination of sheet metal, welding, 3D printed parts, and sourced parts
- Designed wiring for strain relief for maximum life of components
- Created documentation including bill of materials, machine drawings, assembly instructions, schematics, and wiring diagrams
- Interfaced directly with vendors to fabricate parts to specifications and ensure the system was delivered on time
- Hands on assembly and manufacturing of different parts of the system including roof, sensor box, and trunk assemblies.
- Worked with multidisciplinary engineering team including electrical and computer engineers to integrate different parts of the system together

American Institute of Aeronautics and Astronautics Sept. 2013 – May 2014
Design Build Fly Lowell MA
Propulsion Lead

- Led the design for designing motor and batteries for aerospace application in a radio controlled fixed-wing airplane
- Designed and performed tests using the university wind tunnel to size and characterize the propulsion system for maximum performance
- Resulted in fast, lightweight, and competitive plane flown in Wichita KS for the AIAA Design Build Fly competition against other teams from across the world

EDUCATION

University of Massachusetts Lowell Lowell MA Graduated
Bachelor of Science in Mechanical Engineering BSME May 2014

Relevant Coursework: Design of Composite Materials, Aero/Wind Design, Fluid Mechanics, Heat Transfer, Dynamics Systems, Ocean Engineering, Linkage Design, Design of Machine Elements.