Joshua Agby

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OBJECTIVES

I am a young motivated engineer seeking to apply my skills and experience to the development of new and exciting products while gaining additional experience within my field.

EDUCATION

University of Michigan, Ann Arbor MI {Apr 2017}

- B.S.E in Mechanical Engineering
- B.S.E in Computer Science Engineering
- Cumulative GPA: 3.4/4.0

EXPERIENCE

Lead Mechanical Engineer, Manufacturing Director {Aug 2014 - Present}
University of Michigan Solar Car Team (2603 Draper Drive, Ann Arbor MI 48109)

- Lead team of engineers in the design, analysis, and testing of all mechanical systems for 2015 car
- Worked on engineering leadership body to create project timelines, maintain team budget, and organize team design and manufacturing efforts across divisions
- Managed Teamcenter CAD database and vehicle master assembly, including creation and maintenance of complete vehicle BOM
- In charge of all in-house and sourced manufacturing and assembly for 2015 vehicle
- Worked extensively with sponsors to obtain in-kind support for the team
- In charge of ensuring vehicle was ready to drive each day; maintained daily and weekly vehicle checklists, tool organization, and spare parts
- Raced in the 2015 Bridgestone World Solar Challenge

Chassis Engineering Intern – Core Steering {May 2016 – August 2016}
Ford Motor Company (6200 Mercury Drive, Dearborn, MI 48126)

- Worked on core team dedicated to the design, sourcing, and integration of REPAS gears (rack electric power steering)
- Helped organize and administer first round of supplier design competition for T3/T6 program
- Created supplier selection matrix to be used for current and future design competitions to help organize data and make optimal supplier sourcing decisions
- Developed new testing requirements for tie rod boots to ensure reliability and robustness

Shop Staff and Trainer {November 2015 - Present}
Wilson Student Team Project Center (2603 Draper Drive, Ann Arbor, MI 48109)

- Oversee student machine shop and project center, ensuring safety and proper use
- Provide machine and facilities training to students (Lathe, Mill, Truck/Trailer, CNC)

Product Engineering Intern – Metals and Mechanisms (Automotive Seating) {May 2014 - August 2014}
Johnson Controls Inc (47700 Halyard Dr, Plymouth, MI 48170)

- Helped solve current production part issues through testing, redesign, and verification
- Developed testing methods to improve future products by increasing efficiency and reliability

Bus Operator {July 2013 - March 2014}
University of Michigan Transit Services (1213 Kipke Drive, Ann Arbor, MI 48109)

OTHER EXPERIENCE AND SKILLS

- CAD (SolidWorks, CATIA, NX 9, Teamcenter, Hypermesh), FEA (Hypermesh and NX Nastran), and Simulink
- Metals manufacturing (Drafting using GD&T standards, machining parts, and design for manufacture)
- Composites manufacturing (pre-preg, resin infusion, wet-lay, tool design, and ply-schedule creation)
- Advanced CNC machine training (to be trained on Haas equipment, scheduled for Oct 2016)
- Software and programming (C, C++, Python2 and 3, JavaScript, Qt, Git and Github).