**James McNichols** JamesM2012@gmail.com

Campus 1400 Coleman Ave - Mercer Box 72069 - Macon, GA 31207

Home 9 Stuyvesant Cres - Asheville, NC 28803 - (828) 712-7972

**Abilities:** Highly-motivated, Well-versed in software applications and exposure to programming, Excellent interpersonal communication skills, Works well in teams or individually

*Software:*Microsoft Office, iWork, C++, MathCAD, AutoCAD, Pro/ENGINEER, PTC Creo

**Education:** Mercer University Macon, GA Expected Graduation May 2017

B.S.E. Mechanical Engineering Specialization **GPA 3.5**

M.S.E. Mechanical Engineering Specialization

*Relevant* C++ Programing Machine Design

*Coursework:* Calculus 1,2&3 Manufacturing Practices

Differential Equations Materials

Dynamics Physics

Electrical Fundamentals 1&2 Probability and Statistics for Engineers

Engineering Analysis Solid Mechanics 1&2

Experimental Methods for MAE Statics

Feedback Control Technical Communication

Fluid Dynamics Thermodynamics

Heat Transfer Visualization, Drafting & Solid Modeling

*Projects:* • Designed built and flew the phase two design for a stratospheric research capsule

whose poster presentation took first place at the 2014 ASEE/SE conference

• Designed and built a robotic clothes folding device for use in dormitories

* Designed, and built a computerized lighting controller for use in high school theater

*Honors:* Engineering Honors Program President’s List (1 semester) Sigma Xi

Penfield Scholarship Recipient Dean’s List (2 semesters) Phi Eta Sigma

*Study Abroad:* Mercer On Mission Uganda (6 credit hours) Summer 2014

* Five-week service learning program involving design, construction and installation of water wells and pumps in northern rural Uganda.

**Work** Nypro Asheville, NC Summer 2013

**Experience:** Engineering Intern, 45 hrs/wk, 12 wks/yr.

* Worked independently to investigate failures in, and recommend improvements to, the mold upgrade process.
* Used problem solving skills to diagnose specific failure modes in medical device assembly and production

Paul Polack Speaks Asheville, NC Summer 2010

Web Design and Research Intern, 20 hrs/wk, 6 wks/yr.

* Provided research support for multiple humanitarian aid projects
* Assisted with video editing and graphics support for the IDE website

**Leadership:**• Vice President of the Mercer Robotics Club

* Project lead for a near space balloon project

**Activities/** • Undergraduate research with the Mercer Machine Intelligence Robotics Laboratory

**Interests:** • Lighting Technician for the Mercer University Players