DEREK PHILLIPS

derek.j.phillips@vanderbilt.edu (502) 319-0747

Linked in linkedin.com/in/diphillips58

Current Address: PMB 354772, 2301 Vanderbilt Place, Nashville TN 37235 Permanent Address: 1802 Old Frankfort Rd, Lawrenceburg KY 40342

EDUCATION

Vanderbilt University School of Engineering – Nashville, TN

May 2017

Bachelor of Engineering, Mechanical Engineering

Minor: Engineering Management

Current GPA: 3.56/4.00

Honors: Dean's List – Spring/Fall 2014, Spring 2015

Western Hills High School – Frankfort, KY

June 2013

High School Diploma

Honors: Graduated #1 in class of 175

POSITIONS HELD

Smith Seckman Reid, Inc. – Nashville, TN

May – August 2015

Mechanical Engineering Intern

- Worked on the Detroit Event Center (Red Wings) and the Mission Bay Event Center (Golden State Warriors)
- Revit by Autodesk: HVAC design (placing/tagging units & ductwork in a 3D architectural model)
- Unit zoning and sizing, load estimation, space requirement determination, and scheduling using Excel and TRACE 700, according to LEED/ASHRAE standards
- Automation of several company selection processes using Excel (V-lookups, pivot tables, if statements, conditional formatting, and more)

Vanderbilt Solar Decathlon – Nashville, TN

August 2013 – February 2015

President Elect - NOTE: This project was suspended in 2015 due to a lack of funding

- One of 20 teams selected by the Department of Energy to build a 1,000 sf, net-zero, portable solar home
- Directed a 124-person multidisciplinary team at Vanderbilt managing a one million dollar budget
- Collaborated with leadership from Middle Tennessee State University and Habitat for Humanity Nashville
- Planned, ran, and executed weekly general body meetings and board meetings, and provided weekly email updates for our 200 listserv subscribers

CAMPUS INVOLVEMENT

Vanderbilt Design Studio: Mentor – hold a weekly shift, advising students on how to bring their ideas to life.	
Work with 3D Printers, drills, hacksaws, soldering irons, Dremels, etc.	2015 – Present
Vanderbilt Recreation Center: Work eight hours per week under federal work study	2015 – Present
Vanderbilt Aerospace Design Lab, NASA Student Launch Team: Field Engineer	2015 - Present
American Society of Mechanical Engineers: Secretary	2014 - Present
Vanderbilt Innovation and Entrepreneurship Society: Events Coordinator	2014 - Present
Vanderbilt Youth Encouragement Services: Volunteered weekly with inner city children ages 6-18	2014 - 2015
Vanderbilt Solar Decathlon: President	2013 - 2015
Vanderbilt Motorsports FSAE Team: Learned basic machining techniques & fiberglass fabrication	2013 - 2014

SKILLS/PROJECTS

- 3D & 2D CAD, parametric modeling with Creo, rapid prototyping
- Mathematical modeling and data analysis with MATLAB and Excel
- Instrument control and automation with National Instruments' LabVIEW
- Knowledge of statics, dynamics, thermodynamics, materials, fluids, systems, machine design, electric circuits
- Strong mechanical aptitude and spatial ability
- Organized, quick and eager to learn new tasks, punctual
- Refer to LinkedIn for class projects such as a technology strategy report for hydrophobic coatings and an automated pasta cooker, created using LabView and custom designed 3D-printed spools