

Cameron M. Hall

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Address: 5032 Forbes Avenue SMC 5663, Pittsburgh, PA 15289
U.S. Citizen

Education

Carnegie Mellon University

Master of Science in Mechanical Engineering (May 2015)
GPA: 3.25 / 4.00

Technical Experience

'Heavy Shoes' Research (Summer 2013)

- Redesigned and fabricated sensor housing in sole of shoe in order to remedy issues with wear and attachment of previous design

CMU FSAE Fuel Tank (Fall 2012)

- Reverse engineered previous fuel tank in order to gain understanding of design and flat pattern using Sheet Metal tools in Solidworks
- Improved vehicle performance by redesigning fuel tank for minimal volume, and thereby mass, necessary to hold amount of fuel used during longest competition event (i.e. the largest amount of fuel needed for any one event) and by implementing better suited fuel pump and improved baffling system

CMU FSAE Tool Cart (Fall 2012 – Spring 2013)

- Designed and modeled, in Solidworks, a tool cart that would allow for faster repair of vehicle during events; cart included an integrated tire rack, air compressor, tool shelving, removable tool box, and jack
- Performed material selection based on given budget, necessary strength of cart, and ease of fabrication

Work Experience

Carnegie Mellon Mechanical Engineering Department: Machine Shop Assistant (Summer 2014 – Present)

- Responsibilities included design and manufacture of parts for research projects and shop equipment, repair and maintenance of shop machinery, and assistance in planning in new CNC machining course
- Skills utilized include machining with manual and HAAS CNC mills/lathes, prototyping with Stratasys Dimension Elite 3D Printer, toolpath creation with MasterCam x7, and fabrication with Torchmate CNC Cutting System

Carnegie Mellon Mechanical Engineering Department: Teaching Assistant (Spring 2012 – Present)

- Helped students build an understanding of the core concepts of mechanical engineering for Fundamentals of Mechanical Engineering course
- Coordinated and assisted students in lab projects including Wrench Design, Mousetrap-Car Project, Fluids Lab, and Dynamics Lab
- Helped students learn basic Solidworks skills for Introduction to Computer Aided Design course

Extracurricular & Leadership

Phi Delta Theta Pennsylvania Rho Chapter – PDT PA Rho (2013 – Present)

- House Manager (2014)
 - Prepare and execute a budget upwards of \$300,000 in order to finance Chapter contracts, maintenance, and improvement
 - Act as liaison between Chapter and University Housing in order to maintain functionality and cleanliness of Chapter house
- Warden (2013)
 - Drafted document outlining initial Bylaws of Chapter in order to establish a sound and lasting organization on campus and in local community
- Chapter Founding Father (Fall 2013 – Present)
- Phikeia Class President (Spring 2013)

CMU Rugby Football Club – CMURFC (2010 – Present)

- Vice President (2013)

Interfraternity Council

- Vice President of Housing & Finance (2014)

Formula Society of Automotive Engineers Carnegie Mellon Chapter – CMU FSAE (2011 – 2014)

National Society of Black Engineers Carnegie Mellon Chapter – CMU NSBE (2011 – Present)

- Academic Excellence Chair (Fall 2013 – Spring 2014)

Alternative Spring Break – Pittsburgh (Spring 2012)

CMU Mechanical Engineering Service Trip – San Pedro, Philippines (Summer 2011)

Skills

Solidworks, MasterCam, Creo Parametric, MATLAB, Microsoft Software Suite, Autodesk Software Suite