

JOHN ALEX WALLACE

Email: jaw224@pitt.edu
Pittsburgh, Pennsylvania

Education

BACHELOR OF SCIENCE, MECHANICAL ENGINEERING – Expected April 2018

Swanson School of Engineering | University of Pittsburgh

Current GPA: 3.293

Certificate: Innovation, Product Design, and Entrepreneurship

Related Projects

ADVENTURE PACKS – Personal Venture – Summer 2017 – Present

- Designed and manufactured an ultra-light backpack which converts into a shelter system.
- Launched and oversaw a website, Kickstarter, Facebook page, and Instagram dedicated to marketing the product.
- Accepted into the Pitt Blast Furnace student Accelerator.

MATERNAL ASSISTANCE PROGRAMMING – 1st Place – Startup Blitz – October 2017

- Led pitch development for an algorithm that analyzes patient data to screen patients for maternal bleeding, as well as provide doctors with live quantitative data on patient status and bleed predictions.
- Deconstructed graduate student research and reconstructed it into a clear, concise startup model.
- Evaluated market fit for predictive screening, and hospital licensing.

MEDIROUTE – ProfHacks – Rowan University – March 2016

- Led hardware integration using Muse. Coordinated with teammate to analyze raw data using JavaScript.
- Awarded best internal integration, best Amazon Web Services integration, and best tech website.
- Worked on a team of three to develop a web application, which can be implemented in a self-driving car. Data from a Muse headband was analyzed to allow for live detection of a medical emergency. Google Maps API was implemented to allow the car to reroute to the nearest hospital.

SAMSUNG SOLVE FOR TOMORROW – 2014 National Finalist

- Developed an algorithm that would determine the safest walking route in Philly to mitigate the presence of crime.
- Travelled to Austin and D.C. as a team leader to give presentations that won over \$100,000 in technology donations for Academy at Palumbo, a public high school in Philadelphia.

Leadership and Involvement

RESIDENT ASSISTANT – University of Pittsburgh – Pittsburgh, Pennsylvania – August 2016 – Present

- Coordinated diverse programming for 700+ first-year students in an effort to maximize their first-year experience. Marketed campus, building, and floor initiatives through Facebook groups, group chats, fliers, and banners. Actively participated in a team of 21 staff members to solve resident conflicts, build community, and advise residents.

PHYSICS TEACHING ASSISTANT – University of Pittsburgh – Pittsburgh, Pennsylvania – Fall 2015

- Served as a peer mentor by advising students taking Physics for Engineers on how to be successful in the class. Provided structured tutoring and review during weekly office hours.

Experience

RESEARCH ASSISTANT – University of Pittsburgh – Pittsburgh, Pennsylvania – May 2016 – July 2016

- Studied forced air convection through additively manufactured lattice-structured metals in order to determine their effective thermal resistances.
- Authored a MATLAB script to interpolate collected air velocity data and calculate volume flow in the experimental set up.
- Prepared a highly technical research paper and poster to present research findings at the Mascaro Center for Sustainable Innovation Undergraduate Research Symposium.