Chris Lyne

christopher.t.lyne@vanderbilt.edu (865) 719-5621

Education

Vanderbilt University

Bachelor of Engineering Overall *GPA*- 3.67/4.0

May 2015

• Major in Mechanical Engineering, Minor in Scientific Computing

Masters of Science in Mechanical Engineering

May 2017

• Researching thermoelectric energy conversion in fluid power systems

Relevant Experience

Vanderbilt Aerospace Club Nashville, TN

Nov 2013 - Present

Design Engineer, CFD Analyst

http://www.vanderbilt.edu/USLI/2015/

- Member of national championship aerospace design team for the NASA 2014-15 Student Launch
- Thermofluids engineer for flight team; Aerodynamic analysis using ANSYS Fluent
- Payload chamber design and automation; design of an autonomous robotic system for ground sample recovery and placement in the flight rocket
- Rocket design and fabrication; flight trajectory analysis using MatLab
- CFD simulation of past flight experiment; Thermoelectric power generation for waste heat recovery

STORM Lab Nashville, TN

Summer 2014

Intern- Research and Development

- Developed a miniature capsule robot for low-cost endoscopic procedures; targeted for Low and Middle-Income nations to address world health issues
- Designed and built a patent-pending fluid control system for novel fluidic actuation of the capsule

Oak Ridge National Lab Oak Ridge, TN

Summer 2013

Intern – Building Technologies Research and Integration center

- Developed numerical models in support of ongoing research efforts at ORNL
- Current research aims to model home energy use in order to develop smart technologies
- Regular presentations to project supervisor to document progress and planned course of action

Vanderbilt University Nashville, TN

Fall 2014 – Spring 2015

Undergraduate Teaching Assistant

- Worked as a teaching assistant for courses in Fluid Mechanics and Aerospace Propulsion
- Hosted review lectures and office hours, and graded assignments and exams

Technical Skills

Software Creo 2.0, ANSYS 16.0, Comsol Multiphysics, Microsoft Office

Programming Matlab, Python, Java, C++, LabVIEW, Arduino

Selected | Airplane Aerodynamics | Aerospace Propulsion | CFD and Multiphysics Modeling |

Coursework | Gas Dynamics | Mechatronics | Instrumentation | Circuits |