

## **KIREN J. CALDWELL**

The George Washington University  
Amsterdam Hall, 2350 H Street NW, Room 902, Washington, DC 20025  
Phone: (206) 226-0283 Email: kirencaldwell@gmail.com

### **EDUCATION**

Bachelor of Science (anticipated May 2014); GPA: 3.67  
School of Engineering and Applied Sciences, The George Washington University (GWU)  
Major: Mechanical Engineering with Aerospace Concentration; Minor: Electrical Engineering

### **EXPERIENCE**

Experimental Sounding Rocket Team Member: Department of Mechanical and Aerospace Engineering, GWU (Spring 2012 – Present)

- Assisted in 3-D modeling of rocket using PTC Pro/ENGINEER
- Constructed rocket body and internal components
- Developed onboard sensors to determine attitude, position, and velocity

Research Assistant: Flight Dynamics and Control Laboratory, GWU (May 2013 - Present)

- Develop OS X application for enabling graphical user interface with quadcopter
- Perform motor and propeller tests to determine optimal operating conditions
- Aid in construction of variable attitude hex rotor

Research Assistant: Smart Systems Laboratory, GWU (June 2012 – December 2012)

- Developed MATLAB code to perform and analyze simulations of airflow over multi-flap system airfoil with COMSOL Multiphysics
- Assisted in construction of test equipment and control of airfoil with LabView

Research Assistant: Biofluids Dynamics Laboratory, GWU (September 2011 – Spring 2012)

- Wrote MATLAB code to analyze vorticity of blood pumped through curved tube

Mini Baja Team Member: Department of Mechanical and Aerospace Engineering, GWU (2011-12)

- Designed and built Mini Baja Buggy for competition using PTC Pro/ENGINEER

### **COMMUNITY SERVICE**

- Habitat for Humanity (Spring 2013)
- Science and Engineering Festival (2012)

### **ACHIEVEMENTS AND MEMBERSHIPS**

- American Society of Mechanical Engineers (ASME), Member (2011-Present)
- ASME, GWU Chapter, President (2013-Present), Vice President (2012-13)
- American Institute of Aeronautics and Astronautics (AIAA), Member (2011-Present)
- AIAA, GWU Chapter, Treasurer (2012 - Present), Engineer's Council Representative (2013 - Present)
- Dean's Honor's List (Fall 2010 – Present)
- Pi Tau Sigma, Member (Spring 2012 – Present), Engineer's Council Representative (2013 - Present)
- Tau Beta Pi, Member (Fall 2012 – Present), Treasurer (2013 - Present)
- Theta Tau, Member (Spring 2011 – Present), Professional Development Chair (Fall 2013)

### **COMPUTER PROGRAMS AND LANGUAGES**

Experienced in MATLAB, PTC Pro/ENGINEER, Autodesk AutoCAD, COMSOL Multiphysics, C