# Nicklas O. Stockton (719) 648-3545 5274 Brasher Ave. Blue Ash, OH, 45242 EDUCATION University of Cincinnati Bachelor of Science – Aerospace Engineering, Dean's List • GPA: 3.87 overall, 3.90 in Aerospace Engineering • Expected graduation: Spring 2017 RESEARCH & EXTRACURRICULAR

# Air Force Research Labs Autonomous Air Vehicle Conference

2014-Present

- Autonomous Air Vehicle Competition Team Member
  - Competition challenge requirements included locating and imaging a target in an indoor, GPS-denied environment.
  - Developed software to integrate various hardware components to ease the exchange of sensor data.
  - Software processes raw data streams from serial connections to useful information to be used in the control and guidance of the air vehicle.
  - Current work includes developing improved computer vision algorithms and interpreting encoded waypoint information.

# National Science Foundation Undergraduate Research

2013

- Analyzed a benchmark structural stability problem to devise a control methodology using fuzzy–genetic systems.
- System model exhibited both flexible and rigid body modes. Designed controller performed within 3% of theoretically ascertained limit of stability.
- Controller consists of a genetically–tuned fuzzy inference system.
- Presented findings before a peer audience at multiple conferences.

# PROFESSIONAL EXPERIENCE

### **Engineering and Scientific Innovations, Inc.**

Cincinnati, OH

2014-Present

### Research Engineer

- Overhauled proprietary fire suppressant delivery system resulting in a 70% efficiency gain.
- Assisted in the prototyping and proof of concept for flow introduction of powdered agent.
- Performed high-speed cavity analysis of hydrodynamic ram events using custom computer code.

### Green It Up LLC—Lawn Care Company

2011-2013

Sole Owner and Operator Colorado Springs, CO/ Provo, UT

- Grossed \$24,000 in sales in first year of operation.
- Satisfied needs of more than 100 regular clients.
- Maintained brand equity through personal management of 3 employees.
- Managed own finances, accounting and bookkeeping.
- Bought out business partner 3 months after start-up.
- Successfully facilitated transition of business from Colorado to Utah.

### Philippines Bacolod/Iloilo Mission

2008–2010

**Philippines** 

**Volunteer Representative, LDS Church** 

- Learned instructional material in foreign language in 4 months.
- Designed and delivered weekly training sessions for up to 20 volunteers.
- Conducted weekly goal setting and accountability meetings.

Intermountain Lawns 2007–2008

Crew Leader Colorado Springs, CO

- Led and supervised crew of 2–3 people daily.
- Handled and resolved on-site customer concerns.
- Improved maintenance procedure for all company equipment.
- Streamlined daily operations, improving efficiency of small team.

### Embry-Riddle Aeronautical University

2005-2006

USAF Academy, CO

### Flight Line Assistant

- Scheduled flight for over 100 students daily.
- Cleaned and maintained aircraft to ensure flight safety.
- Streamlined student check-in process, increasing instructional flight time.

# **SKILLS**

- Beginner to intermediate proficiency in Autodesk AutoCAD and Inventor Pro.
- Basic software development using MATLAB, Python and Visual Basic for Applications.
- LATEX document preparation and typesetting.
- Familiarity with Linux-based operating systems (Debian derivatives).

### **PUBLICATIONS**

- Janson, A., Stockton, N., Cohen, K., "Genetic Optimization of Fuzzy Logic Control for Coupled Dynamic Systems", *SciTech*, AIAA, Kissimmee, FL, 2015.
- Brown, B., Crowell, C., Feie, B., Hartmann, J., Hutchins, B., Kukreti, S., Mummidivarapu, S., Redmond, B., Sathyan, A., Stockton, N., Stubblebine, A., Kivelevitch, E., Cohen, K., "Development and Validation for the First Annual AAVC Competition by the University of Cincinnati Autonomous Vehicle Group", *Autonomous Aerial Vehicle Conference*, AFRL, Wright–Patterson Air Force Base, OH, 2014.