ANDREW WOERPEL

3010 Todd Drive
Madison, WI 53713

920-988-5872
woerpela@uwplatt.edu

PROFILE / OBJECTIVE

Highly motivated, hardworking, and technically diverse senior Electrical Engineering student seeking an avionics internship opportunity from SpaceX during the summer of 2016. Strong desire to work in the commercial space industry and develop technologies that will help to enable the human colonization of space.

EDUCATION

University of Wisconsin - Platteville, Platteville, WI — Anticipated Graduation: May 2017
College of Engineering, Mathematics, and Science
Major: Electrical Engineering, Emphasizing in Control Systems and Digital Electronics - GPA: 3.88/4.00
Minor: Mathematics

RELEVANT COURSEWORK

Automatic Controls	Signals and Systems	Analog Electronics
Programming in C ++	Logic and Digital Design	Circuit Modeling I & II

INTERNSHIP EXPERIENCE

Orbital Technologies Corporation (ORBITEC) Madison, WI — Fall 2015 – Winter 2016 (Ongoing)
Electrical Engineering Co-op

- Developed cable assemblies, detailed subsystem test procedures, functional test procedures, assembled/troubleshot a hardware-in-the-loop simulator, and assisted with procurement for the next generation of micro-gravity greenhouses that will fly aboard the International Space Station in late 2016.
- Upgraded legacy greenhouse systems to match the Veggie unit which is currently producing food for astronauts on orbit.

Plexus Corporation Neenah, WI — Summer 2015
Software/Product Engineering Intern

- Worked with a team to develop and maintained an 80,000 line C++ code base and corresponding test procedures for continuous integration/hardware-in-the-loop platforms on a large medical project.
- Developed a pneumatically actuated misuse test fixture for engineering confidence testing.

Seljan Company Lake Mills, WI — Summer 2013 - Winter 2015
Mechanical Design Intern

- Established a batch powder coating system from the ground up. The total project cost was approximately $50,000.
- Suggested, designed, and constructed conveyor systems for metal stamping slug removal. System cost was approximately $2500 while equivalent commercially available systems cost in excess of $10,000.

TECHNICAL / ENGINEERING SKILLS

- Laboratory experience with thin film deposition through thermal evaporation, reactive ion etching, scanning electron microscopy, and profilometers from undergraduate research in Microsystems & Nanotechnology
- Self-taught computer programming skills in Python, C++, and MATLAB
- Proficient in SOLIDWORKS 3D modeling software
- Experience designing and building basic data acquisition circuitry and software
- Excellent with fabrication tools and machinery
- Experience with rapid prototyping using 3D printers

MEMBERSHIPS / AFFILIATIONS

- Eagle Scout, Boy Scouts of America — 2001 - 2012
- Pole Vaulter, UW – Platteville Track and Field — Fall 2012 – Winter 2013
- Team Capitan, Society of Automotive Engineers - Aero Design Team — Fall 2014 – Present
- Peer-Assisted Leader (Tutoring program for an entire class) — Spring 2014
- Electrical Team Lead, rLoop - SpaceX Hyperloop Design Competition — Summer 2015 - Present

Please view my Engineering Design Portfolio for detailed overviews of the projects that I have worked on