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| Ethan Corle234 Teaberry Dr.Philipsburg, PA 16866(814) - 360 – 7933elc5217@psu.edu |
| **EDUCATION** | M.S., Aerospace Engineering, Expected Graduation: May 2015 GPA -.--/4The Pennsylvania State University, University Park, PAAdvisor: Dr. Sven SchmitzB.S., Aerospace Engineering, May 2013 GPA 3.90/4The Pennsylvania State University, University Park, PA B.A., Physics, Applied Mathematics Minor, May 2013 GPA 3.97/4Slippery Rock University, Slippery Rock, PA **Relevant Courses**Aerodynamics of V/STOL Aircraft Rotorcraft DynamicsIntroduction to Numerical Methods in Fluid Dynamics Compressible Flow |
| **WORK EXPERIENCE** | **Graduate Research Assistant**Pennsylvania State University, State College, PA; Summer 2013-Present* Optimize rotorcraft on-blade active flap concepts for performance and acoustics
* Analysis carried out through Rotorcraft Comprehensive Analysis System (RCAS)

**Undergraduate Research Assistant**Pennsylvania State University, State College, PA; 2012-2013 Academic Year* Designed and built scaled broadhead arrow models
* Carried out water channel testing of various configurations

**NASA Intern**, **Marshall Space Flight Center**Huntsville, AL; Summer 2012* Performed acoustic finite element simulations on various geometries to predict natural frequencies and mode shapes
* Investigated transfer functions for acoustic senselines

**Undergraduate Research Assistant**University of Maryland, College Park, MD; Summer 2011* Materials Research Science and Engineering Centers program in condensed matter physics
* Implemented various optical measurement techniques to examine surface states on the topological insulator bismuth selenide
* Presented in both oral and poster presentation sessions

**Undergraduate Research Assistant**Slippery Rock University, Slippery Rock, PA; 2010-2011* Conducted research on colloid structures via computer simulation
* Presented results at Slippery Rock student symposium and APS March 2011 meeting in Dallas, TX

**Tutor**,PSUKnowHowState College, PA, 2011-2013* Meet with students individually for a variety of mathematics, physics, and engineering courses.
* Further developed communication abilities
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| **COMPUTER SKILLS** | RCASNastran/PatranLinux | OVERFLOWHTML/CSSMATLAB | COMSOLSolidWorksMathematica |
| **AWARDS** | 2013 – Penn State Aerospace, Richard W. Leonhard Graduate Scholarship 2013 – American Helicopter Society, Vertical Flight Foundation Scholarship2012 – Penn State Aerospace, Richard W. Leonhard Scholarship2012 – Penn State College of Engineering, Stolp Family Scholarship2012 – Penn State, Marjorie W. Dunaway Renaissance Scholarship2011 – COMAP: Mathematical Model Contest, Honorable Mention Submission2010 – Slippery Rock University Physics, Top Pre-Engineering Student2010 – SRU College of Health, Environment and Science, AP Vincent Scholarship2010 – COMAP: Mathematical Model Contest, Meritorious Submission2009 – Slippery Rock University Presidential Scholar, Top 20 Students2008 – Bald Eagle Area High School Valedictorian |
| **ORGANIZATIONS** | **The American Helicopter Society, International**Technical Council Student Representative May 2013-Present* Represent all student membership at AHS Technical Council Meetings
* Carried out survey about how the society can better serve student members

Penn State Chapter President May 2013-Present* Interact with experts in the rotorcraft field to bring high level seminars to Penn State.
* Emphasize undergraduate membership to increase retention rates in engineering
* Organize trips to expose the diverse opportunities of the helicopter industry

**Tau Beta Pi Engineering Honor Society** Activities Chair August 2012-May 2013* Reached out to community members to find service projects for student members

**Member of:**Sigma Gamma Tau Aerospace Honor SocietySigma Pi Sigma Physics HonoraryKappa Mu Epsilon Mathematics Honorary |