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| Ethan Corle  234 Teaberry Dr.  Philipsburg, PA 16866  (814) - 360 – 7933  elc5217@psu.edu | | | |
| **EDUCATION** | M.S., Aerospace Engineering, Expected Graduation: May 2015 GPA -.--/4  The Pennsylvania State University, University Park, PA  Advisor: Dr. Sven Schmitz  B.S., Aerospace Engineering, May 2013 GPA 3.90/4  The Pennsylvania State University, University Park, PA  B.A., Physics, Applied Mathematics Minor, May 2013 GPA 3.97/4  Slippery Rock University, Slippery Rock, PA  **Relevant Courses**  Aerodynamics of V/STOL Aircraft Rotorcraft Dynamics  Introduction 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**,PSUKnowHow  State College, PA, 2011-2013   * Meet with students individually for a variety of mathematics, physics, and engineering courses. * Further developed communication abilities | | |
| **COMPUTER SKILLS** | RCAS  Nastran/Patran  Linux | OVERFLOW  HTML/CSS  MATLAB | COMSOL  SolidWorks  Mathematica |
| **AWARDS** | 2013 – Penn State Aerospace, Richard W. Leonhard Graduate Scholarship  2013 – American Helicopter Society, Vertical Flight Foundation Scholarship  2012 – Penn State Aerospace, Richard W. Leonhard Scholarship  2012 – Penn State College of Engineering, Stolp Family Scholarship  2012 – Penn State, Marjorie W. Dunaway Renaissance Scholarship  2011 – COMAP: Mathematical Model Contest, Honorable Mention Submission  2010 – Slippery Rock University Physics, Top Pre-Engineering Student  2010 – SRU College of Health, Environment and Science, AP Vincent Scholarship  2010 – COMAP: Mathematical Model Contest, Meritorious Submission  2009 – Slippery Rock University Presidential Scholar, Top 20 Students  2008 – 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 Society  Sigma Pi Sigma Physics Honorary  Kappa Mu Epsilon Mathematics Honorary | | |