

Dylan Shane

2073 Callaway Park Pl, Thompson's Station, TN 37179 | (717) 823-7362 | dshane28@gmail.com

Education

Master of Science | May 2018 | The University of Texas at Austin

- Major: Aerospace Engineering
- Overall GPA: 3.47/4.00
- Related coursework: Fundamentals of Solid Mechanics, Theories of Plasticity, Fracture Mechanics, Thin Film Mechanics, Failure Analysis, Mechanics of Composite Materials

Bachelor of Engineering | June 2016 | Vanderbilt University

- Major: Mechanical Engineering
- Minor: Materials Science and Engineering
- Overall GPA: 3.59/4.00 Major GPA: 3.90/4.00
- Related coursework: Aerospace Propulsion, Introduction to Aerodynamics, Finite Element Analysis, Basics of Linear Control Theory, Mechanics of Materials, Engineering Materials Laboratory

Skills

- Strong technical communication skills, both written and oral
- Software: MATLAB, PTC Creo Parametric, Microsoft Office Suite, ANSYS, Photoshop, Wolfram Mathematica, LabVIEW, The Laminator, Arduino
- Familiarity with Agile and Kanban methodology
- Familiarity with material evaluation methods including tensile testing, fracture toughness, fractography, SEM imaging, and spectroscopy
- Familiarity with 3D printing and rapid prototyping technologies
- Ability to quickly assess and access the proper tools to resolve situations
- Strong background in researching unfamiliar topics
- Knowledge of computer hardware

Engineering Experience

Materials-Structure Engineer/Technical Writer | Vanderbilt Aerospace Design Lab | 2015-2016

- 2016 NASA University Student Launch Initiative national champion team
- Conducted experiments to determine mechanical properties of 2x2 twill weave carbon fiber
- Organized interdisciplinary design reports to NASA, each consisting of hundreds of pages technical information
- Presented designs to a panel of leading experts at NASA

Academic Experience

Graduate Research Assistant | The University of Texas at Austin | 06/2017—06/2018

- Refined the current method of growing graphene using chemical vapor deposition (CVD)
- Explored the adhesion properties of the graphene/copper interface under mixed mode loading

Academic Experience (Continued)

Teaching Assistant | The University of Texas at Austin | 06/2017—06/2018

- Served as teaching assistant and grader for Aerospace Materials Lab course
- Supervised undergraduate students during various mechanical experiments including, but not limited to, tensile testing, hardness testing, fracture toughness measurements, fatigue tests, and fractography

Undergraduate Research Assistant | Vanderbilt University | 06/2015—02/2016

- Designed and fabricated custom instrument to measure emission spectra of cadmium selenide (CdSe) nanocrystals embedded in composite matrix during application of external load
- Examined usefulness of embedded CdSe nanocrystals for non-destructive material state monitoring

Teaching Assistant | Vanderbilt University | 08/2015—06/2016

- Served as teaching assistant and grader for Fluid Mechanics and Basic Aerodynamics courses
- Held office hours and conducted review sessions for undergraduate students

Organizations

- American Society of Mechanical Engineers (ASME)
- Nanomanufacturing Systems for Mobile Computing and Mobile Energy Technologies (NASCENT)

Accomplishments

- Recipient, The University of Texas at Austin Graduate School Fellowship 2016-2017
- Recipient, Thrust 2000 Graduate Fellowship in Engineering 2016-2018
- Volunteer, Hospital Hospitality House, Nashville, TN 2013-2014
- Member, Vanderbilt International Relations Association 2012-2016