

Cody R. Bond

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EDUCATION

The University of Texas at Austin

M.S. in Mechanical Engineering

Aug '13 – Present

- Thesis: *Hydrothermal Liquefaction of Biomass Using Concentrated Solar Energy*

University of New Mexico, Albuquerque

B.S. in Mechanical Engineering; Summa Cum Laude with Departmental Honors

Aug '09 – May '13

- Thesis: *Visualization of Wind Data Sets With Cubic Smoothing Splines*
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SKILLS

- 3 years of experience with Microsoft (MS) SQL Server in database construction, automated query design, and data quality maintenance.
 - 3 years of experience using MATLAB for wind data analysis
 - 2 years of designing and prototyping experience using Pro/E/Creo Suite
 - 1 year of conventional Machine Shop prototyping using CNC, end-mill, lathe, and various hand tools
 - 1 year experience using Adobe Acrobat X Pro to create data entry mechanism for Department of Energy website
 - 6 months experience using Star-CCM+ to analyze boundary layer flow
 - Experience utilizing LINUX and FORTRAN to access, and execute processes on, high speed computing systems
 - Advanced user of MS Word, Excel, PowerPoint and Access
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COURSEWORK

Thermodynamics

Boundary Layers

Fluid Mechanics

Technical and Scientific Computing

Applied Thermodynamics

Exergy Analysis of Sustainable Energy

Heat Transfer

ME Design I-V

Advanced Thermodynamics

Incompressible Flows

Intro to Control Systems

WORK EXPERIENCE

The University of Texas at Austin, Teaching Assistant

Aug '13 – Present

- Conducted Heat Transfer laboratory sessions for seniors in Mechanical Engineering
- Evaluated assignments and reports and performed one-on-one tutoring for 6 groups of 3 students

Sandia National Laboratories, Albuquerque, NM, Graduate Intern

Jun '11 – Present

- Contributed as data expert in a group of three professional researchers on first-ever National Wind Reliability Database
- Performed daily maintenance and condition monitoring of wind turbine database in excess of 6.5B records
- Developed and created daily, automated, SQL-based data quality and completeness tools and reporting structures

United States Marine Corps, Sergeant, Non-commissioned Officer (NCO)

Oct '04 – Apr '09

- Managed, trained, and mentored squad of 16 Marines
 - Created, executed, and scheduled daily and annual training for unit of 50 Marines
 - Managed the assignment and maintenance of over \$1M in inventory without incident
 - Three years of experience living outside of the United States
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PROFESSIONAL ACTIVITIES

Team Leader, Senior Design Project, University of New Mexico

Jan '13 – May '13

- Led a team of 5 Mechanical Engineering students to market research, design, and prototype a multi-use all-terrain vehicle lift
- Contributed to the initiation of the patent review process for specific aspects of the prototype

Vice President, Pi Tau Sigma ME Honor Society, University of New Mexico

Aug '13 – May '13

- Arranged and participated in multiple community service events
- Conducted initiations and ensured the continuation of the chapter

PUBLICATIONS

- Hines V., Ogilvie A., Bond C., “Continuous Reliability Enhancement for Wind (CREW) Database: Wind Plant Reliability Benchmark,” Sandia Technical Report SAND2013-7288, September 2013.
- Peters V., Ogilvie A., Bond C., “Continuous Reliability Enhancement for Wind (CREW) Database: Wind Plant Reliability Benchmark,” Sandia Technical Report SAND2012-7328, September 2012.
- Peters V., McKenny B., Ogilvie A., Bond C., “CREW Database: Wind Turbine Reliability Benchmark, US Fleet; Public Report,” Sandia Technical Report SAND2011-8036 P, October 2011.