SPENCER C. HARDING

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Education

BRIGHAM YOUNG UNIVERSITY *Provo, Utah*
Ira A. Fulton College of Engineering and Technology *April 2009*
- Bachelor of Science in Mechanical Engineering; Overall GPA: 3.96
- Minors in Math, Physics, and Business Management
- Heritage Scholar, 4-year full tuition scholarship recipient; Eagle Scout Scholarship

Involvement
- Member, Tau Beta Pi, National Engineering Honor Society
- Member, Phi Kappa Phi, National Honor Society
- Volunteer tutor, university level math and physics courses

WEBER STATE UNIVERSITY *Ogden, Utah*
- Associates of Science in General Studies; Overall GPA: 4.00 *August 2003*

Experience

MECHANICAL ENGINEERING RESEARCH ASSISTANT *Provo, Utah*
Chemical Engineering Department, Brigham Young University *April 2007– Current*
- Co-authored paper for publication and presentation in ASME Turbo Expo 2008 in Berlin, Germany
- Perform bi-weekly accelerated deposition tests to examine effects of particle deposition on heat transfer and flow dynamics for gas turbine engine film-cooled turbine blades
- Analyze post-deposition profiles using a contact profilometer and create 3D surface maps of deposition patterns around film cooling holes
- Head initiatives to calibrate and repair equipment to insure consistent measurements and to maintain functionality of the accelerated deposition facility
- Use DAQ hardware and LabVIEW software to take accurate measurements using rotameters, pressure transducers, thermocouples as well as IR and RGB cameras
- Created mechanism to pre-heat film cooling air to better simulate real turbine blade operating conditions
- Compiled test results and co-authored semiannual report for the US Department of Energy

MECHANICAL ENGINEERING RESEARCH ASSISTANT *Provo, Utah*
Mechanical Engineering Department, Brigham Young University *July – September 2007*
- Research on a US Department of Defense initiative to better understand the feasibility of a portable friction stir welding unit, specifically for maritime applications
- Performed friction stir welds on metals of varying strengths, calculating and recording appropriate force and temperature measurements
- Examined effects of tool geometries on torques, forces and heat generation at the weld site

Volunteer Experience

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS *Toulouse, France*
Missionary *July 2004 – July 2006*
- Represented and shared religious beliefs to uplift others in a faith-based humanitarian effort
- Taught, trained and led groups of up to five missionaries in cultural integration and French language skills

EAGLEWOOD REGIONAL BASKETBALL CLINIC *Salt Lake City, Utah*
Founder, Program Director *Fall 2003*
- Organized and ran clinic for over 20 children between the ages of 8 and 14
- Trained two other volunteers and directed 30+ hours of volunteer work

Relevant Skills

- Proficiency in CATIA, LabVIEW, C++, Matlab, Excel and other similar software packages
- Experience using the lathe, mill, drill press, grinding and polishing tools and other metal shop machinery