

Joshua E. Braband

201 Douglas Drive
Glencoe, MN 55336

(320) 510-2135
JoshBraband@gmail.com

Objective:

I am seeking a position where I am able to use and further develop my skills and experience in design and development, and which offers professional growth and job satisfaction while being challenging, creative, and innovative.

Education:

- Masters of Science in Mechanical Engineering August 2013
University of North Dakota, Grand Forks, ND - 3.636 GPA
- Bachelor of Science in Mechanical Engineering May 2011
Minnesota State University, Mankato, MN

Related Experience:

- Graduate Research Assistant - UND August 2011 – August 2013
- Conduct experiments on creating Evaporative Metal bonded samples of 3 superalloys
 - Evaluate bonding progress of samples using SEM and EDS analysis
 - Collaborate with other graduate students on determining material properties using a TMA
 - Create a finite element model of the bonding process
 - Collaborate with faculty on progress reports to fulfill grant requirements
 - Report findings to aid in future design and manufacture of turbine components
- Graduate Teaching Assistant for EE 206 Introduction to Circuits – UND August 2011- May 2012
- Administer labs and answer questions regarding laboratory work
- Laboratory Teaching Assistant ME 336 Experimentation 1 – MNSU January 2011 - May 2011
- Administer labs and aid in data interpretation for materials testing lab

Engineering Projects:

- Graduate Thesis “Characterization of Evaporative Metal Bonding in Superalloys for use in Gasified Coal Turbine Generators”
- Undergraduate Senior Design Project “Design and Construction of a Steerable Sulky for a Self-Propelled Toro Walk Behind Lawnmower”
- Undergraduate Research Conference “Flow Visualization Apparatus Restoration and Analysis”

Related Skills:

Coursework: Design of Machine Elements I & II, Manufacturing Processes I & II, Composite Materials, Finite Element Analysis I & II, Mechanics of Materials

Software: ProEngineer, ANSYS, ANSYS Workbench, MatLAB, LabVIEW, Microsoft Office Suite

Work Experience:

- Manager October 2012 – May 2013
- Northern Heights Rock Gym
- Counselor Summer 2010 - 2013
- Minnesota All-State Lutheran Choir
- Data Quality and Support Assistant Summer 2009
- Tri-Valley Migrant Head Start
- Counselor Summer 2008
- Green Lake Lutheran Ministries

Activities:

- Presenter at Materials Science and Technology Conference 2012
- American Society of Mechanical Engineers, student member 2007 - present
- President of the UND Climbing Club January 2011 – May 2013
- Secretary of MNSU student section of ASME 2010-2011
- Presenter at ASME Student Professional Development Conference District C 2010
- Presenter at Undergraduate Research Conference 2010
- Destination Imagination Regional Challenge Master 2007-present
- Destination Imagination Appraiser for State and Global Finals 2007-present
- SC/SW Regional Science and Engineering Fair Judge 2008 – 2011
- Boy Scouts of America Eagle Scout Achieved in 2005