

Todd A. Reeder

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(801) 422-5954

EDUCATION

MS, Mechanical Engineering – BYU Fulton College of Engineering Dec 09
Cumulative GPA: 3.60/4.0

BS, Mechanical Engineering – BYU Fulton College of Engineering Apr 08
Cumulative GPA: 3.45/4.0

EXPERIENCE

Graduate Research Assistant Apr 08 - Present

Mechanical Engineering Department, BYU, Professor Dale Tree

- Leading a team of 5 students in obtaining data for an ultra supercritical corrosion model for a coal-fired boiler.
- Examining coal samples with a scanning electron microscope (SEM) for elemental composition.
- Measuring 10 critical exhaust gases with an infrared spectrometer and gas chromatograph.
- 3 of 8 coals analyzed to date.

Undergraduate Research Assistant Nov 07 – Apr 08

Mechanical Engineering Department, BYU, Professor Dale Tree

- Reduced measurement error by designing and building 5 mass flow meters for air and natural gas.
- Enabled measurement of ash emittance by understanding and calibrating a two color pyrometer.
- Facilitated continual research by pulverizing coal to 70% through a 200 mesh.

Engineering Intern Sep 06 – Apr 07

ATK Launch Systems – Minuteman Missile Program

- Analyzed Minuteman static firing test data and wrote bi-weekly reports for ATK engineers and managers.
- Updated drawings and specifications; learned computer applications and company processes in short time.

Engineering Intern Jun 06 – Sep 06

ATK Launch Systems – Facilities Engineering

- Performed structural beam analysis by calculating stresses and suggesting proper replacement.
- Created computer drawings for the above and 3 other projects.

LEADERSHIP

Volunteer Church Representative Jan 02 – Jan 04

The Church of Jesus Christ of Latter-day Saints, Philippines

- Provided leadership, counsel, and training for 12 other volunteer representatives.
- Organized and taught English classes to the people of the Philippines

ADD'L COURSES

- Numerical Heat Transfer
- Intermediate Heat Transfer
- Coal Combustion
- Scanning Electron Microscopy
- Radiative Heat Transfer
- Applied Thermodynamics
- Combustion
- Combustion Engines

SKILLS & INTERESTS

Computer: Microsoft Office, LabVIEW, C++, MatLAB, Fluent/Gambit

Foreign Language: Fluent in Waray-waray and knowledgeable in Tagalog (Phils.)

HOBBIES

Mountain biking, running, camping, skiing, model planes