

DEREK WILLIAM WRIGHT

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RELEVANT EXPERIENCE

- Research Assistant**, Multiple Agent Intelligent Coordination and Control Lab, BYU EE Dept., 8/03
- Researched, designed, and built a magnetometer
 - Learned Eagle software in order to design magnetometer circuit board
 - Aided in interfacing magnetometer with a microprocessor
- Compliant Clutch Testing Machine**, BYU Office of Research and Creative Activities Grant, 1/03-8/03
- Conceived and developed a semi-automated testing machine
 - Programmed a microprocessor to control the process
 - Captured and analyzed data
- Robot Soccer**, Senior Project, BYU EE Dept., 9/02-4/03
- Automated sensing and action based on self, opponent, ball, and field position
 - Assisted in development of Artificial Intelligence ideology
 - Solid-modeled design and built prototypes
- Research Assistant**, Compliant Mechanisms Research Group, BYU ME Dept., 4/02-6/03
- Designed and fabricate proof-of-concept prototypes
 - Created data acquisition platforms for experiments
 - Verified model predictions of new applications
- Ball of Light, Project Leader**, Volunteer, Provo City Fire Department, Provo, UT, 11/01-12/01
- Coordinated with fire department for design parameters
 - Led team of four in concept generation and concept selection
 - Invented the fabrication procedure and a project specific oven
- Engineering Intern**, UTC Hamilton Sundstrand, San Diego, CA, 6/01-9/01
- Performed and analyzed fuel tank evacuation experiments
 - Observed and assisted in test cell procedures
 - Programmed VB6 GUI interfaces for FORTRAN code
- UNITY IV Rocket Project, Oxidizer Team**, Volunteer, BYU ME Dept., 9/00-12/01
- Designed NO₂ valve actuation setup for a 20-ft. tall hybrid rocket
 - Developed a test stand for oxidizer tank evacuation and nozzle testing
 - Aided in creating the pre-launch NO₂ tank filling procedure
- Engineering Intern**, Kvaerner International, E&C Division, San Ramon, CA, 6/00-12/00
- Interpreted drawings and learned 2-D and 3-D Microstation
 - Verified flow chart accuracy
 - Made part specification changes in an Oracle database

QUALIFICATIONS PROFILE

- Education** **B.S., Mechanical Engineering, Brigham Young University, Dec 2003**
- GPA 3.3/4.0
- Related Skills** **CAD and Fabrication**
- Pro/Engineer and AutoCAD
 - Competence on Mill, Lathe, and 3-axis CNC
- Computation**
- Experience with: C, C++, FORTRAN, VB6, and MATLAB
 - Microsoft Office
- Leadership** **BYU ASME Activities Co-Chair, 9/01-4/02**
- Organized design competitions and informational events
 - Helped coordinate intra-college activities
- Dublin High School Student Body President, 6/96-6/97**
- Redesigned Associated Student Body Leadership Council
 - Managed the organizing of events