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EDUCATION

Oregon State University, Corvallis, Oregon, USA

3.86 GPA

September 2007 to Present

Masters of Science in Mechanical Engineering – Design Methodology

Oregon State University, Corvallis, Oregon, USA

Cum Laude

September 2001 to June 2007

Honors B.S. Mechanical Engineering • Honors B.A. International Studies • Business Administration Minor

Universität Karlsruhe, Karlsruhe, Germany

June 2005 to September 2005

Research in humanoid robotics and related systems

Université du 7 Novembre à Carthage, Tunis, Tunisia

September 2004 to June 2005

Coursework in Arabic language, Tunisian culture, women's studies, and environmental science

RESEARCH EXPERIENCE - DOMESTIC

National Center for Accessible Transportation – Oregon State University – Fall 2007 to present

Graduate Research Assistant

- Conduct research on increasing safety and usability of airline aisle chairs for mobility-impaired passengers
- Write and review papers for publication in journals and conference proceedings
- Research mechanical design methodology and new ways of incorporating cultural considerations into the process

Oregon State University Research Diving Program – Oregon State University, Corvallis, Oregon May 2008 to Present Research Diver

- Dive on underwater structures to count and/or capture marine life, perform construction and maintenance on man-made structures, and collect samples in support of ongoing underwater research
- Support general ship-board operations and research while at sea and in port

RESEARCH EXPERIENCE - INTERNATIONAL

Universität Karlsruhe Institut für Produktentwicklung, Karlsruhe, Germany

July to September 2005

Deutscher Akademischer Austausch Deinst - Research Internships in Science and Engineering (DAAD-RISE) Research Fellow

- Designed 6 DOF humanoid robotic shoulders
- Translated and proofread technical papers and posters from German to English
- Worked as part of German university research team using technical German and English

TEACHING EXPERIENCE

Introduction to Design – Oregon State University – Graduate Teaching Assistant – Fall 2008

- Co-teaching two recitation/lab sections of 25-30 junior-level students with a fellow graduate student
- Anticipating teaching a lecture during term under supervision of the course professors, Dr. Irem Tumer and Dr. Dave Ullman

Introduction to Mechanical Engineering – ME 101 - Oregon State University – Head Graduate Teaching Assistant – Fall 2007

- Created weekly recitation lesson plans for freshman course with guidance from course professor, Dr. Joe Zaworski
- Graded 150 freshman students' homework, handled grading disputes, and communicating grades to students
- Coordinated and monitored nine undergraduate teaching assistants who directly taught the recitations

Introduction to Mechanical Engineering – ME 101 - Oregon State University – Undergraduate Teaching Assistant – Fall 2006

- Taught three two-hour recitations under the guidance of the course professor, Dr. Joe Zaworski
- Assisted students with homework and in-class exercises
- Graded homework and reported grades to course professor

CONFERENCE PROCEEDINGS

D. Van Bossuyt, B. Gibson, U. Wörz, and J. Zaworski. **The Integration of Affective Design into QFD** 2008 ASME International Design Theory and Methodology Conference, IDECT/DET2008

CONFERENCE POSTERS

- D. Van Bossuyt, K. Wilson, C. Moen, R. Hess, E. Miles, K. Seniow. When to Quit: What to Consider Before Abandoning a Project 2007 EWB International Conference, EWB2007
- C. Moen, K. Wilson, K. Seniow, D. Van Bossuyt, R. Hess, E. Miles. Water System 2007 EWB International Conference, EWB2007

CONFERENCE PESENTATIONS

- D. Van Bossuyt, B. Gibson, U. Wörz, and J. Zaworski. **The Integration of Affective Design into QFD** 2008 ASME International Design Theory and Methodology Conference, IDECT/DET2008
- D. Van Bossuyt. Mercury Rising: Health Consequences of Mercury Exposure in the Engineering Profession 2007 ASME District D Student Professional Development Conference, SDPC2007

UNDERGRADUATE THESES

- D. Van Bossuyt. **The Eyes of Tunis** Oregon State University Honors College Thesis 2007
- D. Van Bossuyt. International Engineering Interns in their Own Words: Past Interns Share their Stories and their Wisdom with the Future Oregon State University International Degree Program Thesis 2007

MAGAZINE PUBLICATIONS

- D. Van Bossuyt, D. Shapiro. From the Editors in University Honors College Chronicle Fall 2007
- D. Van Bossuyt. The Drunken Ninja of Thala in University Honors College Chronicle Fall 2007
- D. Van Bossuyt. Uncle Douglas does Dinner in University Honors College Chronicle Fall 2007
- K. Lyon, D. Van Bossuyt. The Cherry Play in University Honors College Chronicle Fall 2007
- J. Moser, D. Van Bossuyt. It's Funny Where the Time Goes: The True Story of how we Lost this Issue in *University Honors College Chronicle* Spring 2006
- D. Van Bossuyt. Changing the Chronicle's Old Guard in University Honors College Chronicle Spring 2006
- J. Moser, D. Van Bossuyt. From Two Editors: Behind the Scenes at The Chronicle in *University Honors College Chronicle* Winter 2006
- D. Van Bossuyt. The Night Bus to Tunis in University Honors College Chronicle Winter 2006
- D. Van Bossuyt. Tunisia: Not Just Camels But they Have that too! in University Honors College Chronicle Spring 2005
- D. Van Bossuyt. I am the Woodsman. I am the Businessman. Each of us Imprisoned in *University Honors College Chronicle* Spring 2004
- D. Van Bossuyt, S. Knotts. Jack in The Nuts and Volts of Amateur Robotics August 2002 Supplemental Issue

EDITORIAL ROLES

Editor-in-Chief of University Honors College Chronicle 2006-2007

Co-Editor of University Honors College Chronicle 2005-2006

PROFESSIONAL EXPERIENCE - INTERNATIONAL

Centre d'études maghrébines à Tunis, Tunis, Tunisia

February to June 2005

International Education, Experience, Employment (IE3) Intern

- Helped organize and provide logistics for academic conferences
- Developed part of and ran the first U.S. Department of State Critical Language Scholarship program
- Served as interpreter and escort for visiting academics

Marbrerie Tunis Carthage, Tunis, Tunisia

January to June 2005

Maintenance Engineering Intern

- Investigated automation of marble block cutting equipment to improve efficiency and safety
- Researched efficiency improvements of numeric marble milling machines
- Interacted directly with Tunisian workforce in both Modern Standard and Tunisian dialect Arabic

PROFESSIONAL EXPERIENCE - DOMESTIC

Rosendin Electric Inc, Hillsboro, Oregon

June 2007 to September 2007

Construction Engineering Management Intern

- Supported master scheduler using Prima Vera on a multi-billion dollar construction project
- Worked with project managers to obtain needed materials, schedule manpower, and inspect subcontractor work
- Assisted securing permits and inspections for various commercial and industrial construction projects

Flextronics International, Corvallis, Oregon

December 2006 to March 2007

Hewlett Packard test tool construction group, Intern – Build Supervisor

- Led a team of three assemblers constructing ten test tools for multiple international Hewlett Packard sites
- Created assembly instructions and trained assemblers

Electro Scientific Industries, Beaverton, Oregon

April to September 2006

Electronic Component Solutions group, 35xx Project, Multiple Engineering Cooperative Program (MECOP) Intern

- Researched, designed, and implemented pneumatic (CDA & VAC) subsystems for new product
- Set customer site requirements for new product
- Selected, qualified, and integrated many electrical power distribution components

Freightliner LLC (a DaimlerChrysler company) Portland, Oregon, USA

April to September 2004

Manufacturing Engineering, Test and Technology Group, Multiple Engineering Cooperative Program (MECOP) Intern

- Designed, built, tested, and deployed several production electronic equipment test machines
- Designed and deployed several tools to production lines across the Freightliner North American factories
- Wrote Programmable Logic Controller (PLC) code for test equipment

Planar Systems, Inc. Beaverton, Oregon

June to September 2003 & 2002

American Electronics Association (AeA) Manufacturing Engineering Intern

- Designed and implemented tooling and fixtures in support of the LCD and EL manufacturing process
- Created and revised work instructions supporting the manufacture of LCD and EL products
- Conducted R&D work on ultra-bright transflective LCD displays

Portland General Electric, Salem, Oregon

Groundsman and Traffic Safety Technician

- June to September 2001
- Supported aerial operations from the ground by building up cross-arms, transformers, and other activities
- Controlled traffic flow at worksites to ensure the safety of power crews and general public
- Worked in any condition, day or night, in support of outage repair to keep the grid running

TECHNICAL VOLUNTEER EXPERIENCE

Engineers Without Borders - Oregon State Chapter, Corvallis, Oregon

Past President (2006-2008), Member

- Led 50 active and 200 interested student members (100% volunteer-based)
- Group is currently working on a water treatment and distribution project in El Salvador
- Organized and ran weekly meetings, workshops, seminars, and other activities

Center for Writing and Learning -Oregon State University, Corvallis, Oregon

Technical Writing Assistant

- Work with domestic and international students to improve their technical writing abilities
- Worked with multiple PhD candidates to proof their dissertations, research proposals, and funding requests
- Cross-train writing assistants from other disciplines to better serve the technical writing community

Engineers Without Borders - West Coast Region

December 2007 to Present

October 2005 to Present

September 2005 to Present

State of Oregon Representative to the Board

- Represent Oregon on board of directors for the West Coast region of Engineers Without Borders
- Hold regular conference calls with all Oregon chapter presidents and the West Coast board
- Facilitate information sharing and exchange between chapters, regional governance, and national organization

Oregon State University PADI SCUBA Program – Oregon State University, Corvallis, Oregon September 2007 to Present Diversater

- Support and help instructors supervise beginning and advanced dive students
- Work as part of a team to ensure safety of dive operation, satisfaction of students, and enjoyment of all participants
- Help beginning divers one-on-one to overcome obstacles to their success as SCUBA divers

University Honors College Chronicle Student Magazine, Corvallis, Oregon

Editor in Chief, Contributing Author

- Published two magazines per year to showcase Honors College student work and talent
- Solicited, copy edited, chose for publication, and published all-student submissions
- Interacted with Honors College staff to secure support and funding for publication

NHS Robotics Team, Newberg, Oregon

September 1997 to June 2001

September 2003 to June 2007

Team Leader, Designer, Machinist

- Worked with and lead a team of 15 people designing robots to compete in international design contests
- Designed robots in the following categories: humanoid, animal mimicry, bomb disposal, gladiator combat
- Won several major international design contests (see Honors and Awards section of this document)

SOFTWARE PACKAGES & PROGRAMMING LANGUAGES

- SolidWorks
- Pro-E
- AutoCAD
- MasterCAM
- Delmia
- I-Deas
- Lab View

- Microsoft Word, Access, Excel, PowerPoint, Publisher, Visio
- Square-D PLC programming
- Adobe Photoshop
- Allen-Bradley PLC programming

- MATLAB
- Sketch-It
- Autodesk Inventor
- HTML
- Prima Vera
- CATIA
- LaTeX

PROFESSIONAL MEMBERSHIPS

Engineers Without Borders
American Society of Mechanical Engineers
Pi Tau Sigma – Omega Chapter

HONORS AND AWARDS

- Named one of the 25 most influential undergraduates at Oregon State University
- Waldo-Cummings Outstanding Senior Award
- Graduated Cum Laude
- Mortarboard Senior Honor Society
- Presidential Scholar
- Honor Roll ten times
- Opportunity Plus program

- Society of Manufacturing Engineers International Design Challenge Judge's Choice Award: 2001 & 1999
- American Society of Mechanical Engineers: International Design Contest 2004 (5th Place), Region VIII Design Contest Winner 2004
- Glen Struble Memorial Scholar
- Student Alumni Association Council of Directors

INTERNATIONAL EXPERIENCE

- CENTRAL AMERICA: Five weeks volunteering with Engineers Without Borders (2007)
- GERMANY: Three-month academic program (2005)
- TUNISIA: Nine-month academic program (2004/5)
- EGYPT: Three weeks abroad (2000)
- GERMANY: One month academic exchange (1998)
- MOROCCO, BELGIUM, UNITED KINGDOM: five weeks abroad (1998)
- JAPAN: Two week academic exchange (1997)
- EUROPE: Five weeks abroad (1994)

EXTRACURRICULAR ACTIVITIES & HOBBIES

- Oregon State Cycling Club
- Chehalem Symphony at George Fox University
- Oregon State Symphony
- Backpacking and hiking
- Flying and aviation

- Mortarboard past Communications Chair
- Tunisia Alumni Society
- SCUBA diving
- Fly fishing
- Oregon State International Programs Office ambassador