Jason Schuster

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EDUCATION

TULANE UNIVERSITY, New Orleans, LA **EST** 2017
- Master's of Science in Biomedical Engineering
- Biomechanical Growth and Remodeling Lab – Women's Reproductive Health Team

COLORADO STATE UNIVERSITY, Fort Collins, CO 2015
- Introduction to Human Physiology
- Biomedical Engineering Seminar
- MECH 101 Intro to Manufacturing Processes (2008)
- EDCT 465 Technology Education Methods & Materials (2008)
- CIVE 367 Structural Analyses (2008)
- GPA 4.0

CENTRAL ILLINOIS COMMUNITY COLLEGE, East Peoria, IL 2005
- Art 204 Ceramics I
- GPA 4.0

BRADLEY UNIVERSITY, Peoria, IL 2002
- EE 205 Fundamental Circuit Analyses
- GPA 4.0

UNIVERSITY OF NEBRASKA LINCOLN, Lincoln, Nebraska 2000
- Bachelors of Science in Mechanical Engineering
- Emphasis in Design: MECH 442 Intermediate Kinematics, MECH 468 Failure Analysis
  Senior Design Project: Automated Case Packer for Bottled Water Mfg
- Fundamentals of Engineering Exam, April 2000
- Study Abroad Experiences

  TECHNOLOGICAL INSTITUTE OF MONTERREY, Querétaro, Mexico (1998)
  - Spanish language and culture, lived with a non-English speaking host family, 8 weeks

  UNIVERSITY OF SALAMANCA, Salamanca, Spain (1998)
  - Spanish language and culture, lived with a non-English speaking host family, trimester
- GPA 3.2

INDUSTRY EXPERIENCE

CASE NEW HOLLAND INDUSTRIAL (CNH), Grand Island, NE 2012

Project Engineer III
- Promotion, continuation of Resident Engineer position, recognized for ability to solve problems and make sound engineering decisions.
- Received World Class Manufacturing Silver Kaizen Certificate for quality improvement projects
- Collaborated on a team project to design and build a flow analysis test machine to test pressure drop across the turbo after cooler
- Pilot tested update to Pro/Engineer CREO
- Site knowledge contact for Unigraphics Teamcenter integration for Pro/Engineer

INDUSTRY EXPERIENCE CONTINUED

CASE NEW HOLLAND INDUSTRIAL, Grand Island, NE

Resident Design Engineer 2008

- Provided onsite design support for design teams in Pennsylvania, Iowa, and Belgium
- Applied World Class Manufacturing methodology to improve designs and processes
- Implemented a part design improvement saving $30,000 per year
- Designed the high capacity unload system hydraulics, support structure, and a folding unload auger mechanism
- Co-Invented *Folding Auger Assembly for an Agricultural Harvester* (Patent Application filed by CNH)

COMFORT BY NATURE, Greeley, CO 2006

Vice President of Engineering

- Worked with existing and new customers to understand project requirements, answer questions, and prepare project quotes
- Calculated heat loads using Wrightsoft HVAC software
- Estimated materials and labor
- Designed HVAC systems using AutoCAD LT
- Procured parts, fabricated sheet metal ductwork, and installed HVAC systems
- Accrued $300,000 in approved project bids
- Designed and installed a $120,000 radiant floor geothermal heating and cooling system
- Obtained State of Colorado Certification: GT-68 Loop Fields for Closed-loop Geoexchange Systems
- Obtained Water Furnace Certification: Geothermal Equipment Service/Installation Technician Training

CATERPILLAR, INC., Mossville, IL

Applications Engineer – Environmental Technologies, Mossville Engine Center 2004

- Promoted to coordinate 2007 product integration, design, and durability testing
- Customer design and knowledge contact for Freightliner, GM, and Peterbilt truck engineering teams to meet 2007 EPA Emissions Regulations
- Negotiated packaging requirements and reduced product variations from 67 to 36
- Recognized for “Above and Beyond” effort to meet customer expectations
- Co-Invented US Patent 7669411 B2 *Cooling Device* (filed by Caterpillar, Inc.)

Sr. Associate Engineer – Engine After-treatment Technology, Mossville Engine Center 2001

- Earned Six Sigma green belt, team responsibilities for design and releasing activities of 2003 product for two Six Sigma projects to meet 2003 EPA emissions regulations
- Released 85 improved designs resulting in product cost savings of $3,000,000
- Released 103 new product designs for stationary engine products; forecasted sales of $2,000,000 annually
- Managed offsite design and detailing teams

Design Engineer – Motor Graders Construction Equipment Division 2000

- Team leader for motor grader fuel tank system design
  15 team members consisting of purchasing, manufacturing, testing, and analysis
- 2002 Tier II EPA Emissions Regulations Program
- Resolved 4 product improvement requests to reduce warranty costs
- Recognized for initiative and motivation to achieve goals
- Accumulated 1000+ hours of Pro/Engineer modeling and drafting

INDUSTRY EXPERIENCE CONTINUED

KAWASAKI MOTORS MFG., Lincoln, NE 1997

Manufacturing Engineer Intern

- Designed production line tooling and assembly fixtures for fiberglass jet ski bodies
- 2D design and detailing using CADkey 97 CAD software

SCHUSTER AG INC., Phillips, NE

Farm Hand – Grew up on a farm

- Operation and maintenance of agricultural tractors, trucks, and farm implements
- Farmed 1500 acres of corn and soybeans
- Finished feeding for 2000 head swine finishing facility
- Supervised other farm hands

SKILLS & INTERESTS

COMPUTING

- PTC Pro/Engineer CREO Essentials, Wildfire 4.0
- Unigraphics Teamcenter Integration for Pro/Engineer CREO
- AutoCAD LT 2008
- MATLAB, MathCAD
- Microsoft Office Suite: Excel, Word, Power Point, Visio
- Wrightsoft HVAC Heat Load Calculation
- Adobe Photoshop CS3, Illustrator
- FORTRAN
- SAS

VOLUNTEER ACTIVITIES

- YMCA
  - Volunteer of the Month (January 2013)
  - Half Marathon USATF Course Certification (2011, 2012, 2014)
- Boy Scouts of America
  - Mid-America Pinewood Derby (2011-2014)
  - Managed the “Pro Division” race (2012)
  - Helped with setup, teardown, and displays
  - Built frames to improve the durability and heavy use requirements of the tracks (2014)
- Leadville Race Series
  - Helped direct traffic and ensure safety of runners 2013

HEALTH & FITNESS

- Cycling, running, swimming, and Crossfit
- Cooking with whole foods for optimal nutrition
- Master of SCUBA Diving Certification

MAKER

- Programming micro-processor projects: Arduino and Raspberry Pi
- Built a personal open source 3D printer
- Completed restoration projects of a whole house renovation, a South Bend lathe, and a sailboat
- Woodworking
- Sewing canvas and fabrics