Christine I. Hickernell

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EDUCATION

Northwestern University (NU), McCormick School of Engineering June 2019 (exp.)
Bachelor of Science Mechanical Engineering
Segal Design Certificate
GPA: 3.96/4.00
Relevant Coursework: Interdisciplinary Design Project, Computer Aided Manufacturing: CAD/CAM, Mechanical Design and Manufacturing, Mechanics of Materials, Experimental Engineering, Stress Analysis, Theory of Machines-Design Elements, Design Sketching, Design Thinking & Communication

WORK EXPERIENCE

Design Engineering Intern, Newell, Rubbermaid Consumer and Commercial Solutions June–Sept. 2018

- Designed, modeled, and built an innovative product to train existing refuse can dollies
- Performed Finite Element Analysis, Moldflow Analysis, Design Failure Modes and Effect Analysis, and estimated cost to ensure manufacturability and quality of design
- Coordinated prototype testing with test engineers and technicians to test design performance

CAD Teaching Assistant, DSGN 240, 245, 246, NU Sept.2017–June 2018

- Coached in solid and surface modeling in SOLIDWORKS and Unigraphics NX during class and TA sessions
- Conducted a 30-min presentation on introduction to CAD rendering

Research Intern, Prof. Carrie Hall's Lab, Illinois Tech June–Sept. 2016

- Calibrated the dual fuel combustion engine model in GT-SUITE with the experimental data
- Created confidence in simulation results and reported weekly findings to lab group

PROJECT EXPERIENCE

Interdisciplinary Design Project, DSGN 384-1,2 NU Jan.–June 2018
Client: Andrew Webber from NU Pritzker School of Law

- Designed a trauma wound kit that is fast and easy to use for untrained civilians
- Modeled in SOLIDWORKS and prototyped a simplified tourniquet with on product instructions
- Developed packaging and label design through usability testing and prototypes
- Interviewed 5 doctors and military personnel in the trauma care field

Computer Aided Manufacturing: CAD/CAM, MECHE 340-2 NU Jan–March 2018
Client: Lincoln Elementary 4th graders

- Designed a three-piece snap fit assembly ice cream toy based on 4th graders' drawings
- Modeled parts and molds with Unigraphics NX for injection molding process
- Generated manufacturing program (g-code) for CNC mold halves
- Conducted a production run for dimensional analysis

HONORS

Tau Beta Pi Engineering Honors Society, Member Sept. 2017–present

- Served the community by volunteering, fundraising, and promoting achievement

Pi Tau Sigma Mechanical Engineering Honors Society, Vice President Sept. 2017–present

- Advised students in courses, career, and related questions

Presentation Award, Design Thinking and Communication Design Expo Dec 2015

SKILLS

- SOLIDWORKS, Unigraphics NX, Creo Parametric, Onshape
- 3D Printer, CNC Router, Laser Cutter
- ANSYS/ANSYS Workbench, Autodesk Moldflow, DFMEA, MATLAB, GT-SUITE, Microsoft Office