CAMILLE RUCKER

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EDUCATION

Cornell University, College of Engineering Ithaca, NY
Bachelor of Science in Mechanical Engineering with minor in Design and Environmental Analysis *2015-2019*

- Magna Cum Laude, GPA: 3.85/4.0
- Meinig Family Cornell National Scholar
- Coursework includes Ergonomic Design, Design Psychology, Innovative Product Design Studio, Graphics and Visualization Studio, Orthopedic Tissue Mechanics, Digital Manufacturing, Computer Science, Linear Algebra, Differential Equations, Thermodynamics, Statics and Mechanics, Mechatronics, Fluid Mechanics, Dynamics, Mech. of Materials

Yestermorrow Build/Design School (gap year) Waitsfield, VT
Certificate in Sustainable Building and Design, Certificate in Woodworking *2014-2015*

- Designed and built independent projects including a desk, cabinets, and chairs (see website)
- Studied architecture, sustainable building technologies, permaculture and urban planning

EXPERIENCE

Janicki Industries - Sedro-Woolley, WA *2019-Present*

- Design tooling and create manufacturing drawing packages for marine and aerospace composite components
- Developed naming convention and searchable database for CAD models of purchased parts

Newell Brands Design Center - Kalamazoo, MI *Summer 2018*

- Concept development engineer for consumer products for brands including Graco, Crock-Pot, and Calphalon
- Designed and built functional prototypes that improved product performance and reduced manufacturing costs based on Industrial Design concept sketches
- Graco Sense2Soothe Bassinet: Led market research, mechanism development, initial prototyping, and usability studies to redesign the bassinet to incorporate soothing movement and improve the user experience

Undergraduate Research - Cornell University, NY *Summer 2017*

- Used SolidWorks to design auxetic lattices for use in pneumatic robots and 3D printed the structures with UV curable soft resins

Intel Corp - Chandler, AZ *Summer 2016*

- Characterized and enhanced 3D digital imaging equipment used to measure semiconductor package strain
- Characterized warpage and shape changes of microprocessor packages as a function of process conditions

Taktse International School - Sikkim, India *Summer 2013*

- Developed and led robotics curriculum for high school students. Primary English and Math teacher for first grade

SKILLS

Computer: NX, SolidWorks, AutoCAD, Finite Element Analysis, Computational Fluid Dynamics, ANSYS, Java, MATLAB, Arduino, Google Sketchup, Adobe Photoshop
Design: Prototyping, 3D Printing, Woodworking, Laser Cutting, Model Making, Carbon Fiber Layup, Glassblowing, Welding, Certified in Xeriscape and Desert Landscape Design

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

Team Lead CUSD (Cornell University Sustainable Design) Project *2015-2019*

- Developed a machine learning-based smart HVAC controller to minimize energy usage and costs
- Led the design/building of a full-size model office outfitted with insulation and ductwork for HVAC system testing
- Developed thermal model and simulated heat flow of room using MATLAB to optimize for occupancy/weather

Outdoor activities

- Rock and ice climbing instructor
- AAI Alpine Mountaineering and Technical Leadership (4 weeks), WMI Wilderness First Responder
- Scuba Rescue Diver, Emergency First Responder, Advanced Underwater, Night Diver, and 7 more

HONORS

NCWIT National Award Winner (National Center for Women & Information Technology) *2013*