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, Visual Literacy and Design Studio, Design Graphics and Visualization Studio, Computer Science, Linear Algebra, Differential Equations, Engineering Modern Structures, 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 *Summer 2019-Present*

- Designed tooling and created manufacturing drawing packages for marine and aerospace carbon fiber components
- Developed naming convention and searchable database for 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 ID concept sketches

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, Java, MATLAB, Arduino, Microsoft Office, Google Sketchup, Adobe Photoshop
Design: Prototyping, 3D Printing, Woodworking, Laser Cutting, Model Making, Glassblowing, Welding, Certified in Xeriscape and Desert Landscape Design

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

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

- Developing 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

- AAI Alpine Mountaineering and Technical Leadership (4 weeks), WMI Wilderness First Responder
- Rock and ice climbing instructor
- 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*