

# CAMILLE RUCKER

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## EDUCATION

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

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- 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** 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
- Juggernaut Design, Scottsdale, AZ** Summer 2012
- Researched, designed and prototyped products for clients. Completed independent project of collapsible water bottle drying rack

## SKILLS

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**Computer:** AutoCAD, SolidWorks, Java, MATLAB, Arduino, Google Sketchup, CorelDraw  
**Design:** Laser Cutting, 3D Printing, Prototyping, Model Making, Woodworking, Glassblowing, Welding, Certified in Xeriscape and Desert Landscape Design

## LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

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- 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
- DFA (Design for America)** 2016-
- Working to increase student compliance of composting and recycling guidelines to reduce landfill waste
- 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

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