KATIE HAHM

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EDUCATION

9 / 2013 – present

Stanford University, Stanford, CA
Bachelor of Science: Mechanical Engineering, June 2017
GPA: 3.9

Relevant Coursework:
Introductory Fluids Engineering, Engineering Thermodynamics, Solid Mechanics, Visual Thinking, Probability and Statistics, Artificial Intelligence: Principles and Techniques

EXPERIENCE

6 / 2015 – 8 / 2015

Research Assistant, *Biomimetics & Dexterous Manipulation Lab*, Stanford University, CA
Conducted research on "μTug", micro robots with gecko adhesives that pull up to 2000 times their weight. Researched general principles of load sharing for micro robots. Manufactured 7 prototype μTugs to demonstrate the resulting principles by pulling a car. Conducted experiments, built experimental setups and used MATLAB to process extensive data on relative load sharing capabilities of these μTug and other small robots.

6 / 2015 – 8 / 2015

MicroFactory for Smart Manufacturing, *BDML, SRI International,* Stanford University*,* CA
Stanford and SRI International have developed magnetically actuated microrobots that collaboratively build macro-scale high performance truss structures with carbon fiber rods. Augmented and managed code for parsing 3d CAD structures into microrobotic controls with additional truss elements for extra strength and stiffness.

10 / 2014 – 5 / 2015

Research Intern, *Asian Liver Center*, Stanford University, CA
Developed an online tool for policy makers that uses Markov model data to calculate and predict risk and cost for patients with chronic hepatitis B

PROJECTS

2 / 2015

Bridge Project, *Solid Mechanics*, Stanford University, CA
Performed truss analysis to design and build a high specific strength model bridge from balsa wood with teammates. Modeled, tested and performed failure analysis on bridge

12 / 2014

Digit Recognizer, *Artificial Intelligence*, Stanford University, CA
Used multilayered perceptron, linear classifier, and autoencoder approaches to build an AI that recognizes single handwritten digits to 98.5% accuracy using the MNIST dataset

7 / 2014

Brighten, *iXperience*, Cape Town, South Africa
Designed and built brighten.co.za using Ruby on Rails to encourage and connect volunteers with community service events in South Africa

SKILLS & INTERESTS

Skills: SolidWorks, MATLAB, Python, Rapid Prototyping, C++, C, Java, Ruby on Rails
Interests: aeronautics, robotics, product design, origami, violin, tennis

EXTRACURRICULAR

9 / 2014 – present

External Workshops Leader, *Stanford Design Initiative*, Stanford, CA
Organized and managed workshops about applications of design (graphics, web design).

9 / 2011 – 6 / 2013

Founder & President, *Origami Outreach Club*, Northwood High School, Irvine, CA
Taught origami to disabled students and senior citizens for fun physiotherapy, shared engineering applications of origami theories