# Cassie Meeker

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#### QUALIFICATIONS SUMMARY:

A hard-working, motivated PhD candidate with demonstrated experience in research, machine learning, robotics, and data analysis. Seeks to bring a solution oriented attitude to a summer internship in data analysis.

#### **Education:**

Columbia University, New York, NY Master's Degree in Mechanical Engineering

February 2017

May 2014

University of North Carolina, Chapel Hill, NC Bachelor of Science in Applied Sciences and Engineering Double minor in Physics and Spanish

# **Relevant Coursework:**

COMS 3136 – Essential Data Structures STAT 4400 – Statistical Machine Learning

## Honors and Leadership:

Phi Sigma Pi Honors Fraternity

2012 - 2014

### Work/Research Experience:

PhD Candidate, Mechanical Engineering, Columbia University, New York, NY

September 2015 - Present

- Independent research in rehabilitation robotics and teleoperation
- Developed control mechanisms for orthotic devices and non-anthropomorphic hands using surface EMG
- Experience in data analysis, dimensionality reduction, and machine learning
- Primary author of three peer reviewed papers

Board Member, Women in Science at Columbia

September 2017 - Present

- · Head of Digital Content
- Chair of STEM Starters
- Group leader at Girls Science Day, led middle school girls during science camp experiments
- After school teacher at Robogals, teaching 4<sup>th</sup> grade girls robotics after-school

Lab Manager, UNC Neuroscience Research Center

June 2014 - June 2015

- Hepatocyte and cortical neuron isolations
- Cell culture and drug testing on different cell lines

Research Assistant, UNC Biomedical Engineering department (Anne Taylor Lab)

June 2013 - December 2013

- Involved in design, manufacturing and testing of devices
- Drafted recommendations on potential improvements of existing topics/devices/products

Intern, Banner and Witcoff, LTD, Washington DC

May - August 2012

- Worked on biomedical related patent application for total knee arthroplasty
- Prepared drawings and drafted specification for arthroplasty patent (Pub.No. US 2014/0013565 A1)

#### Skills:

- Proficient using Python, ROS, sklearn, object oriented programming, CAD, Solidworks, Labview, and Matlab
- Experience with C++, STATA, 3-D printing and social media platforms
- Excellent writer, collaborator, communicator and researcher
- Proficient in Microsoft Word, PowerPoint, Excel, Publisher

## **Activities and Interests:**

- President of Swing Club
- Knitting, dancing, cooking, travel

2012 - 2014

References and writing samples available upon request