Rebecca M. Murray

7195 Lerner Hall • New York, NY 10027
rmm2242@columbia.edu • (203) 524-5616

EDUCATION

Columbia University
The Fu Foundation School of Engineering and Applied Science GPA 3.83/4.00
Bachelor of Science in Electrical Engineering Expected May 2018
Minor in English Literature

Coursework: Solid State Devices, Signals and Systems, Electronic Circuits, Circuit Analysis, Data Structures in Java, Probability for Engineers, Mechanics, Electricity & Magnetism, Classical & Quantum Waves, Principles of Economics

RESEARCH

Department of Electrical Engineering, Columbia University Jan 2016-Aug 2016
Faculty Advisor: Prof. James T. Teherani

- Created a numerical simulation of Auger generation in tunneling field-effect transistors using MATLAB
- Included mapping from discrete-space summations to continuous space integrals with non-well-behaved functions, representation of multi-dimensional data, regular progress updates using PowerPoint
- Wrote a paper summarizing research for possible submission to engineering conference

McCormick School of Engineering, Northwestern University 2014-2015

- Designed a medical training simulator with a five-person team for the insertion of PICC lines into premature infants, regularly incorporated feedback from nurses at Lurie Children's Hospital in Chicago
- Conducted research with a four-person team for Orbital Technologies Corporation on the construction of glass out of lunar materials

ACTIVITIES

Society of Women Engineers 2015-present
Executive Board Member – Treasurer

- Collect and submit all financial transaction requests for the 45-member group
- Create and maintain a budget for all committees and events within the group's allocation funding

Organizational Committee Member – Community Outreach

- Planned and coordinated events for 40 middle-school students to visit Columbia's engineering school
- Gave presentations on science and engineering to groups of visiting students

Design for America 2015-2016
Member

- Compiled a report with a five-person team on resources available to student-parents at Columbia
- Experience with human-centered design, conducting interviews, collaboration with community partners

HONORS, AWARDS & RECOGNITION

Siemens Competition in Math, Science and Technology, *Semifinalist* 2014
Connecticut Debate Association, *Varsity State Champion* 2014
Intel International Science and Engineering Fair 2013
Finalist and Fourth Place Award in the Physics and Astronomy category

- Designed and conducted an independent research project on low-powered optical tweezing
- Presented work to judges during poster fairs at the state and international level

SKILLS

Computer: Proficient in MATLAB, familiar with Java and C++
Experience with Microsoft Office (Excel, Word, PowerPoint)
Language: Mandarin Chinese - basic proficiency