## Ilana Bromberg

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#### **EDUCATION**

Stony Brook University, Stony Brook, NY

Bachelor of Science, May 2020

Women in Science and Engineering (WISE) Honors Program

Majors: Physics and Astronomy

Minor: Art History

GPA: 3,.62

#### **RESEARCH EXPERIENCE**

## Weinacht Group for Ultrafast Spectroscopy & Coherent Control

Stony Brook, NY

Research Student, Sept. 2018 – Jan. 2020

- Laser spectroscopy research under the guidance of Professor T. Weinacht
- Analysis of isotopes under vacuum ultraviolet (VUV) radiation
- Analysis of code recreating the two-level atom

# Columbia REU - Radiological Accelerator Research Facility (RARAF)

Nevis Labs, Irvington, NY

Research Intern, Summer 2019

- Designed physical collimation for a neutron spectrum to limit radiation exposure on a mouse sample to the chest cavity - done in MCNP
- Gave a half hour presentation on results
- Created and presented a poster of results for the Conference for Undergraduate Women in Physics (CUWiP)

#### **WORK EXPERIENCE**

### Women in Science & Engineering

Stony Brook, NY

Student Mentor, Sept. 2019 – May 2020

- Mentored and advised three freshmen in the WISE program with declared physics/astronomy majors
- Introduced them to useful coding concepts
- Helped them choose classes and organize schedules
- Gave professional, personal, and academic advice

#### Vanderbilt Planetarium

Centerport, NY

Astronomy Educator/Console Operator, Dec. 2019 – present

- Operates the Konica Minolta and Digital Sky hybrid planetarium system
- Gives star talks to the general public at all ages

#### **SKILLS**

#### Computational

- Python (highly proficient), Java (intermediate), C++/ROOT (intermediate), Fortran (working knowledge)
- Matlab (proficient), MCNP (intermediate), Github (proficient)
- Microsoft Office (highly proficient)

#### Other

- Well versed in data and error analysis
- Comfortable working with large data sets
- Experience working with Photoshop and other image editing programs
- Experience in public speaking from the Alan Alda Center for Communicating Science & the Vanderbilt Planetarium
- Skilled presenter of scientific concepts
- Intermediate Mandarin Chinese speaker

#### **AWARDS AND HONORS**

Presidential Scholarship, 2016 – present

 Full academic scholarship at Stony Brook University

### CAS Dean's Excellence Scholarship, 2016

\$1000 merit-based scholarship

#### Dean's List

 Fall 2016, Spring 2017, Fall 2017, Spring 2018, Spring 2019, Fall 2019

#### **Graduation Honors**

- Cum Laude
- Departmental Honors in Physics