# Gemma W. Shay

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#### **EDUCATION**

Wesleyan University, Middletown, CT Bachelor of Arts in Physics; GPA: 3.64/4.00

May 2018

Wesleyan University's 2018 Outstanding Contribution to Science Education Award Wesleyan University's 2015 Johnston Prize in Physics

#### **SKILLS**

Scala, Java, Spark, Flink, SQL, Git, Python, R, C, Arduino C, HTML/CSS, JavaScript, Mathematica Knowledge of basic electronics, circuitry, and robotics

### **WORK EXPERIENCE**

Bank of America Merrill Lynch, New York, NY

Software Developer

October 2018-Present

- Programmer for non-financial regulatory reporting software under Global Technology and Operations
- Contributed to products such as a query processing DSL (Scala, Spark, Flink), the front-end interface of reporting software (HTML, CSS, JavaScript), and PDF and Excel report generation software (Scala, iText, Apache POI). The majority of my work is back-end programming and testing in Scala.

Girls Who Code, New York, NY

Instructor, Summer Immersion Program – Bank of America

June-August 2018

- Prepared and led lesson plans in Scratch, Python, Robotics, Web Development, and Data Science for a class of 20 high school students
- Managed class logistics, oversaw field trips and events, and worked with two teaching assistants to maintain a safe and enjoyable classroom environment

Weslevan University, Middletown, CT

Peer Tutor, General Physics I, II

October 2017-May 2018

 Provided supplementary course instruction and mentorship to individual students enrolled in physics courses

# Wesleyan Physics Department, Middletown, CT

Course Assistant, General Physics II

January 2018-May 2018

Course Assistant, Waves and Oscillations

September-December 2016

Course Assistant, General Physics I

September-December 2015

- Led weekly study sessions as well as exam review sessions for over 25 students
- Assisted with homework problems, answered students' questions, communicated with their professors regarding the progress of the class

Morgan Lab, Wesleyan University, Middletown, CT

Research Fellow

May-August 2016

- Assisted professor and graduate students in performing molecular spectroscopy experiments
- Completed a personal project simulating the orbits of Rydberg atoms in Mathematica

Research Assistant

January-May 2016

- Assisted graduate students in experimental tasks, mechanical repairs, and collecting data
- Contributed to Morgan Lab's presentation at the 2016 American Physical Society DAMOP conference in Providence, RI

# **VOLUNTEER EXPERIENCE**

United Student/Labor Action Coalition, Logistics Coordinator, Financial Contact Weslevan Concert Committee, Event Organizer

November 2015-May 2018

January 2016-May 2018

Long Lane Farm, Volunteer

September 2016-May 2018