Gilberto Garcia

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EDUCATION

Wesleyan University

Middletown, CT

Email: ggarcia01@wesleyan.edu

Bachelors of Arts

B.A. Astronomy & B.A Physics, GPA: 3.27/4.00

Expected May 2020

Muchin College Prepatory

Chicago, IL July 2016

Honors Diploma GPA: 3.98/4.00

EXPERIENCE

Research Assistant

Middletown, CT

May 2018 - Present

Wesleyan University Department of Astronomy

- Work with Dr. Edward C. Moran, PhD on constructing a catalog of long-term, variable X-ray sources to understand the nature of accretion rates for supermassive black holes at the center of galaxies.
- Created a pipeline to query data from the Chandra X-ray Observatory and apply matching algorithms to find a sources counterpart in other X-ray catalogs. The pipeline applies statistical methods to create light curves using data spanning 4 decades.
- Presented a poster of our work at Wesleyan's Summer Research Symposium (June 2018, June 2019), National
 McNair Conference at UCLA (July 2019), Keck Northeast Astronomy Consortium (KNAC) at Vassar (October
 2019), and American Astronomical Society's 235th Meeting in Honolulu, HI (January 2020). Gave a talk at KNAC
 at Middlebury (October 2018).

Coordinator Middletown, CT

Cross Street Tutoring

Sept. 2016 - Present

- Connect low-income students (K-12) from various Middletown public schools with educational resources, including school supplies and tutors, through a daily after school program.
- Recruit and train groups of Wesleyan tutors on pedagogical methods to more effectively assist Middletown students with classwork and homework while also creating a safe and comfortable work environment.
- Plan weekly events geared towards igniting the Middletown students' interest in STEM and higher education by bringing in speakers and/or creating science lesson plans.

Math Tutor Middletown, CT

Wesleyan University Department of Mathematics

Sept. 2018 - Present

- Host open office hours for Wesleyan students in undergraduate mathematics courses to help with their coursework and homework.
- o Develop personal teaching skills through individual and group tutoring sessions.

Winter Intern
Civis Analytics
Chicago, IL
Dec. 2018 - Jan. 2019

o Create and summarize reports on media consumption by different demographics using data from Nielsen reports.

LEADERSHIP

Teacher Apprentice

Middletown, CT

Wesleyan University Department of Astronomy

Sept. 2019 - Present

- Enhance pedagogical methods by serving as an additional resource for 40 students in Dr. Seth Redfield's ,PhD, introductory Astronomy course (ASTR105) by holding weekly homework help sessions, telescope operating for mandatory class observing nights, and individual tutoring upon request as well as teach class when the professor is unavailable.
- o Practice student assessment skills by creating homework rubrics while also grading student homeworks and exams.

Co-Founder Middletown, CT

Wesleyan Astronomy Club

Sept. 2018 - Present

o Created as a space to for Wesleyan students to get involved with the astronomy department at an enthusiast's level.

 Host and lead biweekly meetings on current and classic topics pertaining to astronomy geared towards people with minimal astronomy and physics knowledge while occasionally opening Wesleyan's telescopes to allow students to observe.

Public Outreach Volunteer

Middletown, CT

Wesleyan University Department of Astronomy

Jan. 2018 - Present

• Engage with the Wesleyan student body and Middletown community by hosting presentations and observing sessions as part of Kids' Night and Space Night, public outreach programs at Wesleyan's Van Vleck Observatory. Kids' Night involves a short demonstration followed by activities and observing for younger children while Space Night involves a presentation delivered at a high-school/college level followed by an observing session.

Orientation Intern Middletown, CT

Wesleyan University Office of Admissions

Aug. 2018 - Sept. 2018, Aug. 2019 - Sept. 2019

- Welcomed and planned events for Wesleyan's incoming class focusing on transitioning into college while creating an inclusive space for all.
- Directed a series of discussions for international, first-generation, and/or low-income students on navigating predominantly white institutions by sharing personal struggles and experiences.

AWARDS, HONORS, AND AFFILIATIONS

• Fellow, CIS Summer Research, Wesleyan University

Summer 2018, Summer 2019

• Fellow, McNair Post-Bacalaureate Program, Wesleyan University

2019-Present

• Recipient, Questbridge National College Match Program

2016-Present

• Fellow, Chicago Scholars Program

2016-Present

Programming Skills

• Languages: Python, C, HTML, CSS Technologies: IRAF, SQL, Mathematica, MATLAB, Excel/VBA, LATEX