

KYLE CAHILL 954-401-8905 Email: Kcahill11293@gmail.com

EDUCATION

Ph.D candidate, Physics 2021 Georgia State University

Bachelor of Science, Physics 2018 Florida International University

Bachelor of Science, Biology 2015 Physics Minor

Mathematics Minor

Nova Southeastern University

RESEARCH EXPERIENCE

Neurophysics Research Group, Georgia State University August 2019-Current

Constructed a program that utilizes a synchro-squeezed transform to analyze power and coherence of EEG time series. Learned how to make a script in DSI studio that can extract DTI statistics including count, qa and nqa. Gained proficiency with FSL and SPM.

Neuroinformatics and Brain Connectivity Lab, Florida International University August 2016-August 2018

Participated in research-design meetings; attended fMRI methodology journal club; annotated classified journal articles: according to "BrainMap" specifications including experience with specifications including but is not limited to paradigm class, behavioral domain, stimulus, response, and instructions. Certified in CITI: Human Subjects Research (HSR).

Antibiotic Resistance in a Periodic Environment, Nova Southeastern University August 2014-May 2015

Received Third Place with teammates in the modality of poster presentations, Nova University's Undergraduate Student Symposium 2015. Research consisted in lab-based analysis of antibiotic resistance of noninfectious E. coli treated with fluctuating intervals of exposure to cannomycin, under the guidance of Dr. Robert Smith and Dr. Louis Nemzer.

Aerosol Pollution from Cruise Ship Emissions, Nova Southeastern University January 2014-August 2014

Evaluated cruise ship emissions and other pollution sources and their effect on the air quality in South Florida. Contributions helped presentations win Second Place at Nova Southeastern University's Undergraduate Student Symposium 2014 under the guidance of Dr. Song Gao.

TEACHING & ADDITIONAL EXPERIENCE

Teaching Assistant, Florida International University 2016-Current Taught seven sections of Physics II labs and two sections of Physics I labs. Performed all the duties as the primary instructor under the direction of FIU's Physics lab coordinator Dr. Xuewen Wang. Duties included giving lectures, assisting with students' questions regarding the lab, grading lab reports, submitting final grades, and being familiar with all laboratory experiments. Assisted other faculty with grading the Physics II class during the 2016 fall semester.

SATPG: SAT Preparation Group, West Palm Beach March 2016-October 2016 Provided one on one tutoring in private family residences for the SAT, ACT and Calculus. Provide a detailed score report on each student after each session which involved grading practice tests, assignments.

TECHNICAL SKILLS

Python, Matlab, Mathematica, Ubuntu, MS Office, HTML

ACADEMIC AND LEADERSHIP HONOR SOCIETIES

Society of Physics Students Sigma Phi Sigma Beta Beta Beta Order of Omega

LEADERSHIP EXPERIENCE

Secretary, Physics & Astronomy Graduate Student Government Association, Georgia State University: 2019-2020, 2021-2022. Kept agenda and minutes for all PGSA meetings.

President, Society of Physics Students, Nova Southeastern University: 2014-2015 Regained official club status; Expanded membership; Improved administrative functions; Organized events

Multiple Roles, Interfraternity Council 2013-2015 *Treasurer*: Expanded the Interfraternity Council budget from \$150 to over \$1000

Secretary: Kept accurate minutes of all IFC meetings over the semester

Multiple Roles, Phi Gamma Delta, Nu Upsilon Chapter Founding Father 2012-2014 *Recording Secretary*: Organized the chapter's internal communication files and records, including minutes, agendas and calendars. Served as Parliamentarian for all meetings. Created chapter's first website. Played a key role in petitioning the International Headquarters for colony to become a fully established Chapter. Oversaw the operations of the Philanthropy, Community Service, and Scholarship committees. *Corresponding Secretary*: Organized the chapter's external communications. Created the first graduate newsletter. Oversaw Graduate Relations, Social and Inter-Fraternity Council committees. Organized events.

OTHER EXPERIENCE:

Membership Associate, Museum of Art Fort Lauderdale 2012-2013 Completed project that digitized business prospects for potential philanthropic support; became familiarized with art exhibits, local attractions, and events; promoted sales of new memberships and renewals; assisted with admissions, cashier and operating duties,

REFERENCES: Available upon request