

KYLE CAHILL

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PROFESSIONAL SUMMARY

Dedicated and accomplished Physics PhD candidate with a strong background in neuroimaging and neurophysics. Adept in conducting research, teaching, and leadership roles. Seeking a postdoctoral position to further contribute to the field of neuroscience.

EDUCATION

PhD Candidate, Physics,

Georgia State University (Expected Graduation: Fall 2024)

Bachelor of Science, Physics

Florida International University (2018)

Bachelor of Science, Biology

Nova Southeastern University (2015)

RESEARCH EXPERIENCE

Neurophysics Lab, Georgia State University (August 2019-Current) Conducting research on structural and functional MRI connectivity analysis on video gamers. Poster presenter at OHBM 2023. Developed an E-Prime script for a study looking into creativity and flow in expert jazz musicians. Enhanced an EEG data analysis script in MATLAB, improving frequency resolution by 3x. Certified in CITI: Human Subjects Research (HSR).

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.

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, Georgia State University. (2019-Current) Taught 18 credit hours of Physics labs (Physics I and Physics II). Duties included conducting lectures, assisting students, grading lab reports, submitting final grades, and managing all aspects involved with conducting the labs. Awarded "Teaching Assistant of the Year" by GSU's Physics and Astronomy Department (2022).

Teaching Assistant, Florida International University (2016-2018) Conducting lectures, assisted students, graded lab reports, and managed all lab related responsibilities.

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

- Programming: Python, MATLAB,
- Neuroimaging: DSI-Studio, FSL, SPM, MRICRON, GIFT, CONN
- Experimental Software: E-Prime, PsychoPy
- Other: Mathematica

ACADEMIC SOCIETIES

Brains & Behavior Fellow, (2020-Current) The Neuroscience Institute at Georgia State runs the Brains and Behavior (B&B) Fellowship program for graduate students across many disciplines whose research contributes to the field of neuroscience.

LEADERSHIP EXPERIENCE

Multiple Roles, Physics Graduate Student Association, Georgia State University (2019-Current)
President (2022-2023), Expanded the organization's operating budget by \$2750, facilitated social events, and ensured organizational stability. *Secretary* (2019-2021) recorded minutes for all E-board and general meetings.
Physics PALS liaison (2023-Current), re-established the department's peer mentorship program.

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 the 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.

REFERENCES: Available upon request.