Aadith Vittala

New York, NY aadith.vittala@nyulangone.org 571-353-4363

Education

New York University, New York, NY June 2022 - current
MD/PhD Student

Rice University, Houston, TX Aug. 2017 - May 2021
B.S. Physics, B.A. Biochemistry, *summa cum laude*
GPA 4.02

University of Oxford, Oxford, UK Jan. 2020 - June 2020
Visiting Physics Student at St Edmund Hall

Research

New York University June 2022 - Aug. 2022
MD/PhD Rotation Student (Advisor: Dr. Paul Glimcher)
· Studied decision-making in patients with depression

National Institute of Mental Health Aug. 2021 - June 2022
NIH Postbac IRTA (Advisor: Dr. Heather Cameron)
· Studied behavioral correlates of adult neurogenesis in rodents

Rice University Jan. 2021 - June 2022
Undergraduate Researcher (Advisor: Dr. Devika Subramanian)
· Applied computational tools to better characterize and predict MIS-C, an inflammatory syndrome triggered by Covid-19 infection in children

University of Oxford Feb. 2020 - June 2020
Undergraduate Researcher (Advisor: Dr. Tim Vogels)
· Applied deep learning techniques to study excitation-inhibition balance in a spiking neural network model

Baylor College of Medicine Aug. 2019 - May 2021
Undergraduate Researcher (Advisor: Dr. Xaq Pitkow)
· Developed computational techniques to infer learning rules in Boltzmann machine models of neural networks
· Applied statistical physics tools to study how architecture affects learning in Boltzmann machines

University of California, San Francisco May - Aug. 2019
Amgen Scholar (Advisor: Dr. Mazen Kheirbek)
· Characterized neural encoding of ambiguous stimuli in the mouse ventral hippocampus
· Developed a behavior task to study necessity of ventral hippocampus for trace associative learning

Publications

Vittala, A., Murphy, N., Maheshwari, A., & Krishnan, V. (2020). Understanding Cortical Dysfunction in Schizophrenia With TMS/EEG. Frontiers in Neuroscience, 14. https://doi.org/10.3389/fnins.2020.00554

Guo, W., **Vittala, A.**, Mckenzie, R., & Yao, Y. (2016). The Need for Genetic Predictors for Antidepressant Actions of Ketamine or Ketamine Metabolites. Journal of Psychiatry and Brain Science, 1(3). https://doi.org/10.20900/jpbs.20160014

Leadership and Service

Rice University Standing Committee on Teaching Aug. 2020 – May 2021
Undergraduate Representative
- Served as undergraduate representative on faculty committee to support and improve teaching
- Polled student body and communicated opinions to committee on updating course evaluation system
- Contributed student perspective while working to modernize teaching award process

Rice iGEM April – Oct. 2018
Modeling Team Leader
- Led mathematical modeling sub-team in a synthetic biology project
- Team received an Honorable Mention for Project at iGEM Jamboree

Head Academic Fellow April 2019 – 2020
- Organized events to enrich the academic setting of Lovett College, including talks by professors, help sessions for finding research opportunities, and the Lovett Undergraduate Research Symposium
- Communicate with college leadership to manage budget and co-host events with other student groups

Academic Fellow Aug. 2018 – May 2021
- Provided free tutoring and review sessions for physics, chemistry, and mathematics classes
- Tutored a total of 5-10 students every week for 2-3 hours

Awards

Rice Alumni in Medicine Research Award May 2022
- Awarded prize for most outstanding research amongst medical school matriculants in 2022

Trustee Distinguished Scholarship August 2017 - May 2021
- Awarded $100K scholarship by Rice University for academic distinction in high school

Tom W. Bonner Book Prize May 2019, 2020, 2021
- Awarded prize for most outstanding physics student three years in a row

Kathleen S. Matthews Teaching and Mentorship Award May 2021
- Awarded prize for teaching excellence from Rice Department of Biosciences

Distinction in Research Award May 2021
- Recognized for producing a substantial research project that went beyond the norm

Rice President's Honor Roll Jan. 2018 - current
- Recognized for outstanding academic achievement in every semester beginning with Fall 2017