

Aditya UPADHYAYULA

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 International student in the U.S. on F-1 visa

EDUCATION

2016-Present	Johns Hopkins University, BALTIMORE, MD, PhD. Psychological & Brain Sciences
2016-2018	Johns Hopkins University, BALTIMORE, MD, M.A. Psychological & Brain Sciences
2015-2016	North Carolina State University, RALEIGH, NC, M.S. Electrical & Computer Engineering
2008-2013	Birla Institute of Technology & Science, PILANI, India, M.Sc. Physics, B.E.(Hons) Electronics & Communications Engineering

RESEARCH EXPERIENCE

August 2019 Present	Visiting Student, TILBURG UNIVERSITY, Netherlands Developing computational methods using psycholinguistic theories to understand narrative comprehension in comics <div>Visual Language Lab Advisor : Dr. Neil Cohn</div>
August 2016 Present	Graduate Student, JOHNS HOPKINS UNIVERSITY, Baltimore, MD Developing computational methods, using psychophysics & eye tracking to understand performance limits in visual cognition & perception <div>Visual Thinking Lab Advisor : Dr. Jonathan Flombaum</div>
August 2015 May 2016	Graduate Student, NORTH CAROLINA STATE UNIVERSITY, Raleigh, NC Developed computational methods using signal & image processing to remove respiratory artifacts in MRI scans <div>Advisor : Dr. David S. Lalush</div>
January 2016 May 2016	Graduate Research Assistant, UNIVERSITY OF NORTH CAROLINA, Chapel Hill, NC Built an EEG processing pipeline & analyzed for frontal asymmetries in the resting state EEG data of patients with Major Depressive Disorder <div>Advisor : Dr. Flavio Frohlich</div>
August 2014 December 2014	Research Assistant, INDIAN INSTITUTE OF SCIENCE, Bengaluru, KA Programmed & Assisted in building a robotic arm to study motor control of eye-hand coordination in humans <div>Advisor : Dr. Aditya Murthy</div>
Jan 2013 July 2014	Research Assistant, INDIAN INSTITUTE OF SCIENCE, Bengaluru, KA Developed prototypes & wrote algorithms for an autonomous Indoor Positioning System that can be used for navigating first responders during disaster management <div>Advisor : Dr. K.V.S. Hari</div>

TEACHING

Spring 2020	Instructor - Cognitive Neuroscience, Johns Hopkins University
Fall 2019	Instructor - Research Methods, Johns Hopkins University
Spring 2019	Instructor - Design & Experimental Analysis, Johns Hopkins University
Fall 2018	Teaching Assistant - Sensation & Perception, Johns Hopkins University
Spring 2018	Teaching Assistant - Introduction to Cognitive Psychology, Johns Hopkins University
Fall 2017	Teaching Assistant - Introduction to Psychology, Johns Hopkins University

PUBLICATIONS (MANUSCRIPTS IN PREP & UNDER REVIEW)

- 2021 **Upadhyayula S.A.**, Ian B. Phillips & Flombaum. J.I. (*In prep*). Space and time dissociate in the construction of a Visual Moment [Watch the talk]
- 2021 **Upadhyayula S.A.**, Ian B. Phillips & Flombaum. J.I. (*In prep*). Subjective expansion of Time happens in our immediate memory, but not perceptual experience [See the poster]
- 2021 **Upadhyayula S.A.**, Ian B. Phillips & Flombaum. J.I. (*In prep*). Before, Now & After. A review on temporal properties of perception
- 2020 **Upadhyayula S.A.**, & Flombaum. J.I. (2020). "A model that adopts human fixations explains individual differences in multiple object tracking." *Cognition* (2020) : 104418.g [link]

CONFERENCES

- 2020 **Aditya Upadhyayula**, & Neil Cohn. Hierarchical Structure in Processing Visual Narratives : A computational investigation, talk presented part of symposium at CogSci. 2020
- 2020 **Aditya Upadhyayula**, Ian Phillips & Flombaum. J.I. Space and Time Dissociate in the construction of the Visual Now, talk presented at V-VSS 2020
- 2020 Ian Phillips, **Aditya Upadhyayula** & Flombaum. J.I. Tachypsychia - subjective expansion of time - happens in immediate memory, and not in perceptual experience, poster presented at V-VSS 2020
- 2019 **Upadhyayula, Shanmukha**, and Jonathan Flombaum, "Distortions of time perception", presented at Mid Atlantic Memory and Attention conference
- 2019 **Upadhyayula, Shanmukha**, and Jonathan Flombaum, Two distortions of perceived space and time, presented at Object Perception Attention & Memory (OPAM)
- 2019 **Upadhyayula, Shanmukha**, and Jonathan Flombaum, The Visual Now across the visual field, presented at Captial Area Cognition Action & Perception
- 2018 **Upadhyayula, Shanmukha**, and Jonathan Flombaum, "Object size affects multiple object tracking performance (but not via frequency of close encounters)." *Journal of Vision* 18.10 (2018) : 1020-1020.

SELECTED INVITED TALKS

- 2021 [*Upcoming*] Yale University, CT - Cognitive & Neural Computation Lab (PI : Ilker Yildirim)
- 2021 [*Upcoming*] University of California, Davis, CA - Visual Cognition Group (PI : John Henderson)
- 2021 New York University - Ma Lab (PI : Weiji Ma)
- 2020 Tilburg University, Netherlands - Groningen-Tilburg joint workshop on Pictorial narrative comprehension
- 2020 University of California, San Diego, CA - Cognitive tools lab (PI : Judith Fan)
- 2019 Villanova University, PA - Mid Atlantic meeting on Memory & Action
- 2018 Georgetown University, DC - Captiol Area conference on Cognition, Action & Perception
- 2018 Johns Hopkins University - Seminar on Computational Psycholinguistics (PI : Tal Linzen)
- 2018 Johns Hopkins University - Dynamic Perception Group (PI : Jason Fischer)
- 2017 Johns Hopkins University - Computational Cognition, Vision & Learning group (PI : Alan Yuille)
- 2017 Johns Hopkins University - Honey Lab (PI : Chris Honey)

SKILLS

Programming	Python MATLAB, R, C, Eye Tracking, EEG processing, Javascript, HTML, Java
Operating Systems	MacOs, Linux, Windows
Software	PyTorch, Psychopy, Psychtoolbox, Plotly, Tensorflow, Eyelink 1000 plus, EEGLAB

HONORS AND AWARDS

- 2019 Travel Award, Object Perception Attention and Memory conference
- 2019 Departmental Collaborative Research Grant Award | Topic : Individual differences in temporal integration of music
- 2016 Robert S. Waldrop Graduate Student Fellowship
present

REFERENCES

Jonathan Flombaum

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Justin Halberda

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