SUSHRUT THORAT

Contact Information EMAIL: sushrut.thorat94@gmail.com WEBPAGE: sushrutthorat.com GITHUB: novelmartis

OTHER INFO: G-Scholar, Full-CV

GOAL

Understanding and building resource-constrained agents that can learn and function in the wild

ACADEMIC

Postdoc in Machine Learning

Ongoing

Trajectory

Institute of Cognitive Science, Osnabrück University, Germany

Ph.D. in Cognitive Neuroscience

November, 2022

Donders Centre for Cognition, Radboud University, The Netherlands

M.Sc. (with honors) in Cognitive Neuroscience

July, 2017

Center for Mind/Brain Sciences (CIMeC), University of Trento, Italy

B.Tech. in Engineering Physics

August, 2015

Department of Physics, Indian Institute of Technology - Bombay (IIT-B), India

TECHNICAL PROFICIENCY **Programming languages:** Python, MATLAB, Javascript

Machine learning frameworks: TensorFlow, PyTorch, MatConvNet

Experimentation frameworks: PsychToolbox, jsPsych, Pavlovia

Neuro-imaging: fMRI (data acquisition and analysis), EEG (data analysis)

SELECTED **PUBLICATIONS** Thorat S*, Aldegheri G*, Kietzmann TC (2021). Category-orthogonal object features guide information processing in recurrent neural networks trained for object categorization. Shared Visual Representations in Human & Machine Intelligence Workshop @ NeurIPS. *equal contribution.

Thorat S, Proklova D, Peelen MV (2019). The nature of the animacy organization in human ventral temporal cortex. eLife 8: e47142.

Anthes D, Thorat S, Konig P, Kietzmann TC (2023). Diagnosing catastrophe: Large parts of accuracy loss in continual learning can be accounted for by readout misalignment. Conference on Cognitive Computational Neuroscience (CCN): 748-751.

Thorat S, Peelen MV (2022). Body shape as a visual feature: evidence from spatially-global attentional modulation in human visual cortex. NeuroImage: 119207.

Thorat S, Doerig A, Kietzmann TC (2023). Characterising representation dynamics in recurrent neural networks for object recognition. Conference on Cognitive Computational Neuroscience (CCN): 645-647.

Notable ACHIEVEMENTS

- Voted best poster/short-pitch, among 15 posters, in the 'Perception, Action, and Control' theme at the annual Donders Poster Session (2020)
- Recipient of the **Abstract Award**, awarded to **5 of the 57** accepted abstracts at the Rovereto Workshop on Concepts, Actions and Objects (2017).
- Ranked 721 among 450,000 students in the Joint Entrance Examination (JEE, 2011) conducted towards admission to the Indian Institute of Technology (IIT).

REVIEWING WORK

PLOS Computational Biology, Nature Communications, Science Advances, NeurIPS workshops, Memory & Cognition, eLife, CCN

SUPERVISION

Supervised 9 undergraduate, 3 masters, and 3 PhD students.