SUSHRUT THORAT

CONTACT INFORMATION

EMAIL: sushrut.thorat94@gmail.com   WEBPAGE: sushrutthorat.com
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INTERESTS

The building blocks of open-domain artificial agents - knowledge representation, continual learning, memory encoding and retrieval, and theory of mind; Neuroscience-inspired AI

EDUCATION

Ph.D. in Cognitive Neuroscience   *Ongoing*
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 PEER-REVIEWED PUBLICATIONS

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

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

Thorat S, van Gerven MAJ, Peelen MV. (2018) The functional role of cue-driven feature-based feedback in object recognition. *Conference on Cognitive Computational Neuroscience (CCN)*: 1-4.

Thorat S, Choudhari V. (2016) Implementing a Reverse Dictionary, based on word definitions, using a Node-Graph Architecture. *Proceedings of COLING 2016, the 26th International Conference on Computational Linguistics: Technical Papers*: 2797-2806.

Thorat S, Rajendran B. (2015) Arithmetic computing via rate coding in neural circuits with spike-triggered adaptive synapses. *International Joint Conference on Neural Networks (IJCNN)*: 1-8.

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 **Merit Award** (2017), awarded to students who achieve remarkable results at the end of their degree, by the University of Trento, Italy.
- 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

eLife'20, Monk Prayogshala'19 , Conference on Cognitive Computational Neuroscience (CCN)'19

SUPERVISION EXPERIENCE

Supervised 7 undergraduates and 1 masters student during their thesis projects.