MUFENG TANG

○ (+44) 7497865905 ○ mufeng.tang@ndcn.ox.ac.uk ○ OX1 3TH Oxford, UK

EDUCATION

University of Oxford — Oxford, UK
DPhil (PhD) Computational Neuroscience — *2021 - 2025 (expected)*

University of Chicago — Chicago, IL
MS Statistics, **GPA:3.8/4.0** — *2019 - 2021*

University College London — London, UK
BASc Science and Engineering, **First Class Honours** — *2016 - 2019*

PUBLICATIONS/PREPRINTS

Tang, M., Salvatori, T., Millidge, B., Song, Y., Lukasiewicz, T. and Bogacz, R., 2022. Recurrent predictive coding models for associative memory employing covariance learning. *bioRxiv*. [URL]

Tang, M., Yang, Y. and Amit, Y., 2022. Biologically Plausible Training Mechanisms for Self-Supervised Learning in Deep Networks. *Frontiers in computational neuroscience, 16*. [URL]

CONFERENCE ABSTRACTS

Tang, M., Salvatori, T., Millidge, B., Song, Y., Lukasiewicz, T. and Bogacz, R., 2022. Associative Memory via Covariance-learning predictive coding networks. In: *Memory in Artificial and Real Intelligence Workshop at the 36th Conference on Neural Information Processing Systems (NeurIPS)*.

RESEARCH EXPERIENCE

University of Chicago — Chicago, IL
Research Intern, *Grossman Center for Quantitative Biology and Human Behavior* — *Aug 2020 - Oct 2021*
Advisor: Prof. Jason MacLean

- Topic: Recurrent spiking neural network models for neo-cortical computations, preceded with a convolutional neural network trained to model the pre-processing of natural movies by the visual cortex.

University of Chicago — Chicago, IL
Student Researcher, *Department of Statistics* — *June 2020 - Sep 2021*
Advisor: Prof. Yali Amit

- Topic: Self-supervised neural networks with localized learning rules and objective functions as a biologically plausible model of learning in the brain.

Univercity College London — London, UK
Undergraduate Researcher, *Centre for Advanced Spatial Analysis* — *Oct 2018 - June 2019*
Advisor: Prof. Steven Gray

- Topic: Sentiment and geographical analysis of Twitter posts using machine learnig methods.

AWARDS AND SCHOLARSHIPS

University of Oxford, **St Cross E.P. Abraham Scholarship £15,000/annum**	*Sep 2021*
University of Chicago, **tuition scholarship for academic excellence $5540/quarter**	*July 2020*
University of Chicago, **tuition scholarship $4610/quarter**	*July 2019*

TEACHING EXPERIENCE

Teaching assistant at University of Chicago — *Spring 2021*
STAT25025 Machine Learning and Large-scale Data Analysis

COMPETITIONS

Kaggle ASHRAE Great Energy Predictor, Silver Medal (among 3,600 teams)
Kaggle Competition   *Dec 2019*

SKILLS

Programming Languages and Frameworks
Python (PyTorch, Tensorflow, Scikit-learn), R, Matlab, Java, CSS, HTML