

Amartya Sanyal

☎ (+44) 7448438276 | ✉ amartya18x@gmail.com | 🏠 <https://www.amartya18x.github.io> | 📷 amartya18x | 🐦 @AmartyaSanyal

Education

D.Phil in Computer Science (Advisor : Dr. Varun Kanade and Dr. Phil Torr)

2017 - 2021

UNIVERSITY OF OXFORD, ST. HUGH'S COLLEGE

B.Tech. in Computer Science and Engineering (Minor in Linguistics Theory)

CPI - 9.4/10.0

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

2013 - 2017

Research Experience

Facebook AI Research, Dr. Edward Grefenstette

London, UK

PART TIME RESEARCHER, GENERALIZATION IN PRESENCE OF EXTERNAL KNOWLEDGE

November 2020 - Now

Facebook AI Research, Dr. Edward Grefenstette

London, UK

RESEARCH INTERN, GENERALIZATION IN REINFORCEMENT LEARNING

June 2020 - September 2020

Laboratory for Computational and Statistical Learning, Prof. Lorenzo Rosasco

Genoa, Italy

VISITING RESEARCHER, IMPLICIT REGULARIZATION OF GRADIENT DESCENT

June 2019 - July 2019

Twitter Cortex, Nicolas Koumchatzky

New York, NY, USA

RESEARCH INTERN, ADVERSARIAL GENERATION OF DISCRETE SEQUENCES

May, 2017 - August 2017

Montreal Institute of Learning Algorithms, Prof. Yoshua Bengio

Montreal, QC, Canada

RESEARCH INTERN, LANGUAGE MODELLING WITH ADAPTIVE SEGMENTATION

May, 2016 - July, 2016

Amazon.com - Guided by Dr. Atool Saroop and Dr. Rajeev Rastogi

Bengaluru, India

MACHINE LEARNING INTERN, COMPETITIVE PRICING WITH THE MACHINE LEARNING SELLER SERVICE TEAM

May, 2015 - July, 2015

Teaching Responsibilities

'21	Tutor in Computational Learning Theory , Dept. of Computer Science	University of Oxford
'19', '20	Tutor in Theory of Optimization (60 students) , Department of Engineering Science	University of Oxford
'18, '19, '20	Tutor in Machine Learning , Wadham College, Worcester College, Dept. of Computer Science	University of Oxford
'17	Teaching Assistant in Computational Complexity , Department Computer Science	University of Oxford
'14	Academic Mentor , Linear Algebra, Real Analysis and ODEs	IIT Kanpur

Academic Reviewing

'21	Conference Reviewing for AISTATS 2021, ICLR 2021, ICML 2021,
'20	Conference Reviewing for SODA 2020, NeurIPS 2020, ICML 2020, CVPR 2020, ECCV 2020,
'20	Workshop Reviewing for Workshop on Dataset Curation and Security, NeurIPS 2020
'20	Journal Reviewing for International Journal of Computer Vision,
'20	Reviewer for Workshop on Continual Learning, ICML 2020
'19	Conference Reviewing for NeurIPS 2019,
'19	Reviewer for Critiquing and Correcting Trends in Machine Learning, NeurIPS 2019

Program Committees

2018	Wining and Dining Officer , St. Hugh's College MCR	University of Oxford
2019	Vice-President , St. Hugh's College MCR	University of Oxford
2015	Editor , Vox Populi, Campus Newsletter of IIT Kanpur	IIT Kanpur
2016	Coordinator , SIGML - Special Interest Group in Machine Learning	IIT Kanpur
2011	President , Social Welfare Group, St. Xaviers School, Raiganj	
2015	Editorial Executive , Science And Technology Council - Core Team	IIT Kanpur

Awards & Visits

- '17-'21 **Turing Doctoral Studentship Award**, Awarded by The Alan Turing Institute London, UK
'20 **Top Reviewer Award**, Awarded to top 33% reviewers ICML 2020
'19 **Top Reviewer Award**, Awarded to top 400 reviewers NeurIPS 2019
'18 '20 **ICML Travel Award, ICLR Travel Award**, International Machine Learning Society
'18 **Attended Machine Learning Summer School**, Buenos Aires, Argentina
'14 & '16 **Academic Excellence Award**, Awarded to top 10% student IIT Kanpur
'13 **KVPY(Kishore Vaigyanik Pratyashona Yojana)** , Awarded to 280 students by the Gov. of India

Talks

- Aug '20 **Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur,** IIT Kanpur
Sep '20 **Department of Computer Science and Engineering, Indian Institute of Technology, Hyderabad.,** IIT Kanpur
Oct '20 **Thoth team, Inria Grenoble Rhône-Alpes, France.,** Inria Grenoble
Oct '20 **Machine Learning and Computer Vision Group, Institute of Science and Technology, Austria.,** IST Austria
Nov '20 **Max-Planck-Institut für Informatik, Saarbrücken, Germany.,** MPI Saarbrücken
Nov '20 **Math Machine Learning seminar MPI MIS + UCLA, Max-Planck-Institut für Mathematik,** MPI Leipzig
Feb '21 **Department of Computer Science, Harvard University,** Harvard University

Publications

How Benign is Benign Overfitting ?

Amartya Sanyal, Varun Kanade, Philip H.S. Torr, Puneet K. Dokania
International Conference on Learning Representations (ICLR), Spotlight Paper, 2021

Progressive Skeletonization: Trimming more fat from a network at initialization

Pau Jorge, Amartya Sanyal, Harkirat S. Behl, Philip H. S. Torr, Gregory Rogez, Puneet K. Dokania
International Conference on Learning Representations (ICLR), 2021

Stable Rank Normalization for Improved Generalization in Neural Networks and GANs

Amartya Sanyal, Philip H.S. Torr, Puneet K. Dokania
International Conference on Learning Representations (ICLR), Spotlight Paper, 2020

The Intriguing Effects of Focal Loss on the Calibration of Deep Neural Networks

Jishnu Mukhoti, Amartya Sanyal, Viveka Kulharia, Stuart Golodetz, Philip H. S. Torr, Puneet K. Dokania
Advances in Neural Information Processing Systems (NeurIPS), 2020

TAPAS: Tricks to Accelerate (encrypted) Prediction As a Service

Amartya Sanyal, Matt Kusner, Adria Gascon, Varun Kanade
International Conference on Machine Learning (ICML), 2018

Robustness via Deep Low Rank Representations

Amartya Sanyal, Varun Kanade, Philip H.S. Torr, Puneet Dokania
Workshop on Theory and Application of Deep Generative Models, ICML, 2018

Optimizing non-decomposable measures with deep networks

Amartya Sanyal, Pawan Kumar, Purushottam Kar, Sanjay Chawla, Fabrizio Sebastiani
Springer, Machine Learning (2018). 2018

Multiscale sequence modeling with a learned dictionary

Bart Merriënboer, Amartya Sanyal, Hugo Larochelle, Yoshua Bengio
Workshop on Machine Learning in Speech and Language Processing, ICML, 2017

Agent based simulation of the evolution of society as an alternate maximization problem

A. Sanyal, S. Garg, A. Unmesh, H. Karnick
2017 International Conference on Behavioral, Economic, Socio-cultural Computing (BESC), 2017

A Hybrid Deep Architecture for Face Recognition in Real-Life Scenario

Amartya Sanyal, Ujjwal Bhattacharya, Swapan K. Parui
Lecture Notes in Computer Science (Vol. 10481), 2016