

ANIKET DAS

CS PHD STUDENT, STANFORD UNIVERSITY

EDUCATION	Stanford University <i>PhD in Computer Science</i> Sep'24 - Present
	Indian Institute of Technology Kanpur <i>BTech. Electrical Engg. & BS Mathematics</i> Overall GPA : 9.3/10 Math GPA : 9.8/10 Jul' 17 - May' 22 (8 Semesters)
	Aalto University <i>Academic Exchange, School of Science</i> GPA : 4.78/5 Jan' 20 - Dec' 20 (2 Semesters)

INTERESTS Probability Theory, Algorithms, Statistical Inference, Optimization

PUBLICATIONS	<ol style="list-style-type: none"> Near-Optimal Streaming Heavy-Tailed Statistical Estimation with Clipped SGD Aniket Das, Dheeraj Nagaraj, Soumyabrata Pal, Arun Suggala, Prateek Varshney <i>Neural Information Processing Systems 2024</i> [NeurIPS'24] Provably Fast Finite-Particle Variants of SVGD via Virtual Particle Stochastic Approximation Aniket Das, Dheeraj Nagaraj Spotlight at <i>Neural Information Processing Systems 2023</i> [NeurIPS'23] Oral at <i>Optimal Transport and Machine Learning Workshop, NeurIPS 2023</i> Utilising the CLT Structure in Stochastic Gradient based Sampling : Improved Analysis and Faster Algorithms Aniket Das, Dheeraj Nagaraj, Anant Raj <i>Conference On Learning Theory 2023</i> [COLT'23] Near Optimal Heteroscedastic Regression with Symbiotic Learning Dheeraj Baby, Aniket Das, Dheeraj Nagaraj, Praneeth Netrapalli <i>Conference On Learning Theory 2023</i> [COLT'23] Sampling without Replacement Leads to Faster Rates in Finite-Sum Minimax Optimization Aniket Das, Bernhard Schölkopf, Michael Muehlebach <i>Neural Information Processing Systems 2022</i> [NeurIPS'22] NeurInt - Learning Interpolation by Neural ODEs Avinandan Bose*, Aniket Das*, Yatin Dandi, Piyush Rai Spotlight at <i>DL & Differential Equations Workshop, NeurIPS 2021</i> [DLDE'21] TorchGAN: A Flexible Framework for GAN Training and Evaluation Avik Pal*, Aniket Das* <i>Journal of Open Source Software 2021</i> [JOSS'21] Jointly Trained Image and Video Generation using Residual Vectors Yatin Dandi, Aniket Das, Soumye Singhal, Vinay P. Namboodiri, Piyush Rai <i>Winter Conference on Applications of Computer Vision 2020</i> [WACV'20]
--------------	--

* : indicates equal contribution

EXPERIENCE	Google DeepMind, India <i>Pre-Doctoral Researcher, Machine Learning and Optimization (MLO) Team</i>	<i>Jul'22 - Aug'24</i>
	Max Planck Institute for Intelligent Systems, Germany <i>Internship Advisors : Bernhard Schölkopf & Michael Muehlebach</i>	<i>Jul'21 - Dec'21</i>
	Tata Institute of Fundamental Research, Mumbai <i>Internship Advisor : Sandeep Juneja</i>	<i>Apr '21 - Jun '21</i>
COURSEWORK	Computer Science	Introduction to Programming, Data Structures and Algorithms, Advanced Algorithms, Toolkit for Theoretical Computer Science [†] ,
	Probability & Statistics	Probability Theory [†] , Markov Chains [†] , Optimization, Kernel Methods and Learning Theory, Statistical Signal Processing, State Space Models Probabilistic Modelling & Inference, ML for Signal Processing
	Mathematics	Real Analysis, Complex Analysis, Functional Analysis, Topology, Measure Theory, Differential Geometry, Dynamical Systems, Ordinary Differential Equations, Partial Differential Equations, Linear Algebra, Abstract Algebra, Numerical Methods
[†] : Audited at TIFR		
INVITED TALKS	Linear Time Streaming Algorithms for Heavy Tailed Statistics MSR-IISc Theory Seminar 2024	[Slides] [Video]
	Sampling Through the Lens of Optimization : Recent Advances and Insights MSR-IISc Theory Seminar 2023, EPFL FLAIR Seminar 2024	[Slides] [Video]
	Utilising the CLT Structure in Stochastic Gradient-Based Sampling Conference on Learning Theory 2023	[Slides]
	Near-Optimal Heteroscedastic Regression with Symbiotic Learning Conference on Learning Theory 2023	[Slides]
SERVICE	CS Graduate Mentor	Stanford University
	Reviewer	NeurIPS 2023, AISTATS 2022, NeurIPS 2021 DLDE Workshop
	Co-ordinator	Special Interest Group in Machine Learning, IIT Kanpur
	Project Mentor	Programming Club, IITK and Stamatics (Math Club), IITK
AWARDS AND HONORS	Academic Excellence Award, IIT Kanpur KVPY Scholarship, Govt. of India	