Satadal Sengupta (Sata)

Date of Birth	17th September 1991	**Email**	satadal.sengupta@cs.princeton.edu
Nationality	Indian	**Website**	https://satadalsengupta.github.io

Education

Sep 2019 - Present	*Princeton University*, USA Ph.D. Candidate (4th year), Dept. of Computer Science **Topic (Tentative):** Fine-Grained Internet Measurements in the Data Plane **Advisor:** Jennifer Rexford
Jan 2016 - Feb 2019	*Indian Institute of Technology (IIT) Kharagpur*, India Master of Science (MS) (By Research), Computer Science and Engineering; *CGPA: 9.66/10* **Thesis:** Network Traffic Regulation Techniques for Experience Differentiation **Advisors:** Sandip Chakraborty, Niloy Ganguly [Complex Networks Research Group (CNeRG)]
July 2009 - May 2013	*National Institute of Technology (NIT) Durgapur*, India Bachelor of Technology (B.Tech.), Computer Science and Engineering; *CGPA: 8.37/10* **Thesis:** Secure Routing in Delay Tolerant Networks **Advisors:** Subrata Nandi, Sujoy Saha [Mobile Computing and Networking Research Group]

Employment & Internship History

June 2022 - Sep 2022	*Netflix*, California, USA *Applied Research Intern*, Open Connect. **Advisor:** Sergey Fedorov
Mar 2019 - Aug 2019	*ETH Zürich*, Switzerland *Research Intern*, Network Design & Architecture Lab. **Advisor:** Ankit Singla
May 2015 - Feb 2019	*Indian Institute of Technology (IIT) Kharagpur*, India *Research Fellow (SRF/JRF)*, Computer Science and Engineering
Sep 2013 - Apr 2015	*Oracle Financial Services Software Ltd.*, Bangalore, India *Associate Applications Developer*, Oracle FLEXCUBE Development
May 2012 - July 2012	*Microsoft India R&D Private Ltd.*, Hyderabad, India *Software Development Engineer (Intern)*, Microsoft IT

Selected Publications*

*List of <u>all</u> publications available at *https://satadalsengupta.github.io/#publications*

Conferences & Workshops

IMC 2022	Oliver Michel, **Satadal Sengupta**, Hyojoon Kim, Ravi Netravali, Jennifer Rexford, ***Enabling Passive Measurement of Zoom Performance in Production Networks***, in *ACM IMC*.
SIGCOMM 2022	**Satadal Sengupta**, Hyojoon Kim, Jennifer Rexford, ***Continuous In-Network Round-Trip Time Monitoring***, in *ACM SIGCOMM*.
IAB-QoE 2021	**Satadal Sengupta**, Hyojoon Kim, Jennifer Rexford, ***Fine-Grained RTT Monitoring Inside the Network***, in the *Internet Arch. Board Wkp. on Measuring Network Quality for End-Users*.
WWW 2019	**Satadal Sengupta**, Niloy Ganguly, Pradipta De, Sandip Chakraborty, ***Exploiting Diversity in Android TLS Implementations for Mobile App Traffic Classification***, in *WWW*.
ICNP 2018	**Satadal Sengupta**, Niloy Ganguly, Sandip Chakraborty, Pradipta De, ***HotDASH: Hotspot Aware Adaptive Video Streaming using Deep Reinforcement Learning***, in the *IEEE International Conference on Network Protocols*.

IM **2017**	**Satadal Sengupta**, V. Yadav, Y. Saraf, H. Gupta, N. Ganguly, S. Chakraborty, P. De, ***MoViDiff: Enabling Service Differentiation for Mobile Video Apps***, in Mini Conference Track of the *IFIP/IEEE International Symposium on Integrated Network Management (IM)*.
NOSSDAV **2017**	A. Mondal, **Satadal Sengupta**, B.R. Reddy, M.J.V. Koundinya, Chander G., P. De, N. Ganguly, S. Chakraborty, ***Candid with YouTube: Adaptive Streaming Behavior and Implications on Data Consumption***, in the *ACM SIGMM Workshop on Network and Operating Systems Support for Digital Audio and Video (NOSSDAV)*.
IMC **2016**	R. Sen, H.A. Pirzada, A. Phokeer, Z.A. Farooq, **Satadal Sengupta**, D. Choffness, K.P. Gummadi, ***Inspecting the Free Bridge Across the Digital Divide: Assessing the Quality of Facebook's Free Basics Service***, in *ACM Internet Measurement Conference (IMC)*.

Journal

WiNe **2016**	S. Saha, S. Nandi, R. Verma, **Satadal Sengupta**, K. Singh, V. Sinha, S.K. Das, ***Design of Efficient Lightweight Strategies to Combat DoS Attack in Delay Tolerant Network Routing***, in *Journal of Wireless Networks (WiNe)*, Springer, 2016.

Posters & Demos

MobiCom **2018**	M.R. Dey, **Satadal Sengupta**, B.K. Mohanta, D. Jena, S. Chakraborty, ***Magneto: Leveraging Magnetic Field Changes for Inferring Smartphone App Usage***, in the Poster Track of *ACM MobiCom*, 2018.
SIGMETRICS **2017**	S. Singh, V. Nanda, R. Sen, S. Ahmad, **Satadal Sengupta**, A. Phokeer, Z.A. Farooq, T.A. Khan, P. Kumaraguru, I.A. Qazi, D. Choffnes, K.P. Gummadi, ***An Empirical Analysis of Facebook's Free Basics***, in the Poster Track of *ACM SIGMETRICS*, 2017.
[†]**COMSNETS** **2016**	D. Jain, S. Agarwal, **Satadal Sengupta**, P. De, B. Mitra, S. Chakraborty, ***Prediction of Quality Degradation for Mobile Video Streaming Apps: A Case Study using YouTube***, in the Poster Track of *COMSNETS*, 2016.

Grants & Awards

- ***Best Academic Demo*** at *COMSNETS 2017* & [†] ***Best Poster*** at *COMSNETS 2016*.
- ***WWW'19*** & ***Microsoft India*** *Student Travel Grants* for attending *WWW 2019*.
- ***ICNP'18*** & ***ACM/IARCS-India*** *Student Travel Grants* for attending *IEEE ICNP 2018*.
- ***MMSys'17*** *Student Travel Grant* for attending *ACM MMSys 2017*.

Teaching Assistance

Semester	Institute	Course	Instructor
Fall '20, Spr. '21	Princeton U.	Advanced Programming Techniques	Robert Dondero
Spr. '16, '17, '18	IIT Kharagpur	Computer Networks	Sandip C., Niloy G.
Fall 2017	IIT Kharagpur	Performance Modeling of Computer Networks	Sandip Chakraborty
Fall 2016	IIT Kharagpur	Smartphone Computing & Applications	Niloy Ganguly

Extra-Curriculars

- Freelance Writer for ***JÑĀNĀLOK Infotech*** – a Kolkata based creative writing company, from 2009 to 2013.
- Served as a volunteer at **The Web Conference 2019** and as the volunteer captain at **COMSNETS 2018**.
- ***Languages:*** English, Hindi, Bengali (Proficient); Spanish, German, Nepali (Elementary)

Last Updated: 2 September 2022