

Satadal Sengupta (Sata)

Date of Birth 17th September 1991
Nationality Indian

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Education

- Sep 2019 - Present** - **Princeton University**, USA
Ph.D. Candidate (2nd 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

- Mar 2019 - Aug 2019** - **ETH Zürich**, Switzerland
Research Intern, Department of Computer Science
Project: Congestion Control in Satellite Constellation Networks
Advisor: Ankit Singla [Network Design & Architecture Lab]
- May 2015 - Feb 2019** - **Indian Institute of Technology (IIT) Kharagpur**, India
Senior Research Fellow (SRF) (JRF till Oct 2017), Computer Science and Engineering
- Sep 2013 - Apr 2015** - **Oracle Financial Services Software Ltd.**, C.V. Raman Nagar, 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 all publications available at <https://satadalsengupta.github.io/#publications>

Conferences

- WWW 2019** - **Satadal Sengupta**, Niloy Ganguly, Pradipta De, Sandip Chakraborty, ***Exploiting Diversity in Android TLS Implementations for Mobile App Traffic Classification***, accepted in *The Web Conference (WWW)*, 2019.
- 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 (ICNP)*, 2018.
- 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)*, 2017.
- 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)*, 2017.

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)*, 2016.

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 2017 A. Sharma, J. Arora, P. Khan, S. Satapathy, S. Agarwal, **Satadal Sengupta**, S. Mridha, N. Ganguly, *CommBox: Utilizing Sensors for Real-Time Cricket Shot Identification and Commentary Generation*, in the Demos and Exhibits Track of *COMSNETS*, 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.

§Best Academic Demo Award †Best Poster Award

Grants and Awards

- *The Web Conference Student Travel Grant* for attending *The Web Conference 2019*.
- *Microsoft India Student Travel Grant* for attending *The Web Conference 2019*.
- *ICNP'18 Student Travel Grant* for attending *IEEE ICNP 2018*.
- *ACM/IARCS-India Student Travel Grant* for attending *IEEE ICNP 2018*.
- *MMSys'17 Student Travel Grant* for attending *ACM MMSys 2017*.
- *APSys'17 Student Travel Grant* for attending *ACM SIGOPS APSys 2017*.

Teaching Assistance

| Semester | Institute | Course | Instructor |
|--------------------|---------------|---|--------------------|
| Fall '20, Spr. '21 | Princeton U. | Advanced Programming Techniques | Robert Dondero |
| Spring 2018 | IIT Kharagpur | Computer Networks | Sandip Chakraborty |
| Spring 2016, 17 | IIT Kharagpur | Computer Networks | Niloy Ganguly |
| 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: 5 April 2021