

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 (3rd 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
[Incoming] *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 all publications available at <https://satadalsengupta.github.io/#publications>

Conferences & Workshops

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| SIGCOMM 2022 | Satadal Sengupta, Hyojoon Kim, Jennifer Rexford, <i>Continuous In-Network Round-Trip Time Monitoring</i> , in ACM SIGCOMM, 2022. |
| IAB-QoE 2021 | Satadal Sengupta, Hyojoon Kim, Jennifer Rexford, <i>Fine-Grained RTT Monitoring Inside the Network</i> , in the Internet Arch. Board Wkp. on Measuring Network Quality for End-Users. |
| WWW 2019 | Satadal Sengupta, Niloy Ganguly, Pradipta De, Sandip Chakraborty, <i>Exploiting Diversity in Android TLS Implementations for Mobile App Traffic Classification</i> , in WWW, 2019. |
| ICNP 2018 | Satadal Sengupta, Niloy Ganguly, Sandip Chakraborty, Pradipta De, <i>HotDASH: Hotspot Aware Adaptive Video Streaming using Deep Reinforcement Learning</i> , in the IEEE International Conference on Network Protocols (ICNP), 2018. |
| IM 2017 | Satadal Sengupta, V. Yadav, Y. Saraf, H. Gupta, N. Ganguly, S. Chakraborty, P. De, <i>MoViDiff: Enabling Service Differentiation for Mobile Video Apps</i> , in Mini Conference Track of the IFIP/IEEE International Symposium on Integrated Network Management (IM), 2017. |

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| NOSSDAV 2017 | A. Mondal, Satadal Sengupta , B.R. Reddy, M.J.V. Koundinya, Chander G., P. De, N. Ganguly, S. Chakraborty, <i>Candid with YouTube: Adaptive Streaming Behavior and Implications on Data Consumption</i> , in the <i>ACM SIGMM Workshop on Network and Operating Systems Support for Digital Audio and Video (NOSSDAV)</i> , 2017. |
| IMC 2016 | R. Sen, H.A. Pirzada, A. Phokeer, Z.A. Farooq, Satadal Sengupta , D. Choffness, K.P. Gummadi, <i>Inspecting the Free Bridge Across the Digital Divide: Assessing the Quality of Facebook's Free Basics Service</i> , in <i>ACM Internet Measurement Conference (IMC)</i> , 2016. |

Journal

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

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| MobiCom 2018 | M.R. Dey, Satadal Sengupta , B.K. Mohanta, D. Jena, S. Chakraborty, <i>Magneto: Leveraging Magnetic Field Changes for Inferring Smartphone App Usage</i> , in the Poster Track of <i>ACM MobiCom</i> , 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, <i>An Empirical Analysis of Facebook's Free Basics</i> , in the Poster Track of <i>ACM SIGMETRICS</i> , 2017. |
| †COMSNETS 2016 | D. Jain, S. Agarwal, Satadal Sengupta , P. De, B. Mitra, S. Chakraborty, <i>Prediction of Quality Degradation for Mobile Video Streaming Apps: A Case Study using YouTube</i> , in the Poster Track of <i>COMSNETS</i> , 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.
- **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 |
| 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: 9 May 2022