

# Satadal Sengupta

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**Date of Birth** 17<sup>th</sup> September 1991  
**Nationality** Indian

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## Education

**Sep 2019 - Present** *Princeton University*, USA  
Ph.D. Candidate (2<sup>nd</sup> year), Dept. of Computer Science  
**Topic:** Internet Measurements in the Data Plane  
**Adviser:** 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  
(advised by Sandip Chakraborty, Niloy Ganguly)  
**Research Group:** 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 (advised by Subrata Nandi, Sujoy Saha)  
**Research Group:** Mobile Computing and Networking Research Group (MCN-RG)

## Employment + Internship History

**Mar 2019 - Aug 2019** *ETH Zürich*, Department of Computer Science  
Research Intern, Network Design & Architecture Lab  
**Project:** Congestion Control in Satellite Constellation Networks (advised by Ankit Singla)

**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 2020	Princeton	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, Nepali (Elementary)

**Last Updated:** 4 September 2020