

Satadal Sengupta

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Education

Sep 2019 - Present **Princeton University**, USA
Ph.D. Candidate (1st year), Dept. of Computer Science

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	Course	Instructor
Spring 2018	Computer Networks	Sandip Chakraborty
Spring 2017, 2016	Computer Networks	Niloy Ganguly
Fall 2017	Performance Modeling of Computer Networks	Sandip Chakraborty
Fall 2016	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)