# Iqra Altaf Gillani

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CONTACT
INFORMATION
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WEBPAGE
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RESEARCH
INTERESTS
Data Algorithmics, Probabilistic Analysis of Networks, Distributed Computation, Network and Data Science

EDUCATION

**Indian Institute of Technology, Delhi**      January 2016 - March 2021

Ph.D. in Computer Science and Engineering

- Advised by Prof. Amitabha Bagchi
- CGPA: 9.7 on scale of 10
- Thesis: *A Stochastic Process with a Laplacian Connection*

**National Institute of Technology, Srinagar**      August 2011 - June 2015

B.Tech. in Information Technology

- Gold medallist
- CGPA: 9.503 on scale of 10
- Thesis: *Biologically Inspired Algorithm to Provide Energy Efficient Wireless Sensor Networks*

**Delhi Public School Srinagar**

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|---|---:|
| Class XII (CBSE) with 95.6% | March 2011 |
| Class X (CBSE) with 93.4% | March 2009 |

EXPERIENCE

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|---|---:|
| **NIT Srinagar: Assistant Professor** | March 2021 - Present |
| **NIT Srinagar: Trainee Teacher** | January 2016 - March 2021 |
| **IIT Delhi: Teaching Assistant** | July 2015 - December 2016 |

PUBLICATIONS

- **Iqra Altaf Gillani**, Amitabha Bagchi, Pooja Vyavahare.
  **A Stochastic Process on a Network with Connections to Laplacian Systems of Equations.**
  To appear in *Adv. Appl. Probab.*
- **Iqra Altaf Gillani**, Amitabha Bagchi.
  **A Queueing Network-Based Distributed Laplacian Solver.**
  *Algorithmica* **83**:2859-2894, June 2021.
- **Iqra Altaf Gillani**, Pooja Vyavahare, and Amitabha Bagchi.
  **Lower bounds for In-network Computation of Arbitrary Functions.**
  *Distrib. Comput.* **34**:181-193, April 2021.
- Kartik Sharma, **Iqra Altaf Gillani**, Sourav Medya, Sayan Ranu, Amitabha Bagchi.
  **Balance Maximization in Signed Networks via Edge Deletions.**
  In *Proc. of 14th ACM Intl. Conf. on Web Search and Data Mining (WSDM 2021)*, pp. 752-760, March 2021.
- **Iqra Altaf Gillani**, Amitabha Bagchi.
  **A Queueing Network-Based Distributed Laplacian Solver for Directed Graphs.**
  *Inf. Proc. Lett.* **166**:106040, February 2021.
- **Iqra Altaf Gillani**, Amitabha Bagchi, Sayan Ranu.
  **A Group-to-Group Version of Random Walk Betweenness Centrality.**
  In *Proc. of ACM India Joint Intl. Conf. on Data Science and Management of Data (CODS-COMAD 2021)*, pp. 127-135, January 2021.

- **Iqra Altaf Gillani**, Amitabha Bagchi.
  **A Queueing Network-Based Distributed Laplacian Solver.**
  In *Proc. of the 32nd ACM Symposium on Parallelism in Algorithms and Architectures (SPAA 2020)*, pp. 535-537, July 2020.
- Zilmarij Iqbal, Rahila Rahim and **Iqra Altaf Gillani**.
  **Light-weight, Real-time Internet Traffic Classification.**
  In *Proc. of 2019 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS '19)*, pp. 1-6, December 2019.

AWARDS AND HONOURS
- Ph.D. thesis nominated for *Distinction in Doctoral Research Award* at IIT Delhi for the year 2020-2021.
- *Outstanding TA Award* for the course COL106 Data Structures and Algorithms, Sem I 2016-2017 at IIT Delhi
- *Outstanding TA Award* for the course COL216 Computer Architecture, Sem II 2015-2016 at IIT Delhi
- Selected as Trainee Teacher in the Department of Information Technology, NIT Srinagar under MHRD's Teacher Trainee Programme (January 2016)
- Received *Visvesvaraya Ph.D. fellowship* (July 2015 - December 2015)
- Received *Gold Medal* for achieving highest CGPA in B.Tech. Programme
- Selected for *In-Residence Programme for NITs Scholars* at Rashtrapati Bhavan, New Delhi (May 2015)
- Qualified for National level Robotics event *Autobotz-AVR* organized by Technophilia (2012)
- *Student of the Year Award (Batch 2011)* at Delhi Public School, Srinagar (March 2011)
- Won creative writing contest *Think Big* organized by Rising Kashmir (2010)
- Won best *Technical skier Award* at Skiing event, Gulmarg, J&K (2008)

WORKSHOPS/CONFERENCES
ATTENDED
- ACM *International Conference on Web Search and Data Mining (WSDM'21)*, Virtual Event (March 2021)
- *Academic Research and Careers for Students Symposium (ARCS'21) and ACM india Annual Event*, Virtual Event (February 2021)
- *Advances in Applied Probability II*, International Centre for Theoretical Sciences, TIFR, Virtual Event (January 2021)
- ACM India *Joint International Conference on Data Science & Management of Data (CODS-COMAD'21)*, Virtual Event (January 2021)
- Faculty Development workshops, Virtual event, IIT Hyderabad (November-December 2020)
  - *Visual Tools & Techniques for Effective Communication*
  - *Probability through Python*
  - *Advanced Pedagogies: Active Learning and Digital Tools*
- *Bernoulli-IMS One World Symposium 2020*, Virtual Event (August 2020)
- ACM *Symposium on Parallelism in Algorithms and Architectures (SPAA'20)*, Virtual Event (July 2020)
- SIAM Workshop on *Network Science*, Virtual Event (July 2020)
- DST UKIERI International Workshop on *Towards Intelligent Communication Networks, ANTS'19*, BITS Pilani, Goa (December 2019)
- Workshop on *Impact of Emerging Standards, 5G and Beyond, and Machine Learning on Connected Vehicles ANTS'19*, BITS Pilani, Goa (December 2019)
- IEEE *International Conference on Advanced Networks and Telecommunications Systems (ANTS'19)*, BITS Pilani, Goa (December 2019)
- ACM *India Grad Cohort*, IIT Delhi, New Delhi (July 2019)
- Doctoral Symposium, *International Conference on Distributed Computing and Networking (ICDCN'18)*, IIT BHU, Varanasi (January 2018)
- *Big Data Analytics* Workshop at NIT Srinagar (March 2017)
- *In-Residence Programme for NITs Scholars*, Rashtrapati Bhavan, New Delhi (May 2015)
- *Networking Technologies (CCNA)*, HCL CDC, South EX, New Delhi (January - February 2014)

- *Aerotrix*, Aeromodelling workshop, NIT Srinagar, Srinagar (2013)
- *Autobotz-AVR*, National level Robotics event organized by Technophilia, NIT Srinagar, Srinagar (2012)