

Hridoy Sankar Dutta

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LINKS

Website: <https://hridaydutta123.github.io>
Github: <https://github.com/hridaydutta123/>
DBLP: http://dblp.uni-trier.de/pers/hd/d/Dutta:Hridoy_Sankar
Google Scholar: <https://scholar.google.co.in/citations?user=4UrQjwUAAAAJ&hl=en>
LinkedIn: <https://www.linkedin.com/in/hridoy-sankar-dutta-18448a63/?ppe=1>

EDUCATION

PhD in Computer Science and Engineering Aug 2017 - Present
Indraprastha Institute of Information Technology Delhi (IIIT-D), India
• Thesis Title: *Detecting and reasoning collusive activities in online media*
• Supervisor: **Dr. Tanmoy Chakraborty**, Assistant Professor & Ramanujan Fellow, Dept. of CSE, Indraprastha Institute of Information Technology Delhi (IIIT-D), India

M.Tech in Computer Science and Engineering 2015 - 2017
National Institute of Technology Durgapur, West Bengal, India
• Thesis Title: *An offline crisis mapping system for large-scale natural disasters*
• Supervisor: **Prof. Subrata Nandi**, Professor, Dept. of CSE, NIT Durgapur and **Dr. Sujoy Saha**, Assistant Professor, Dept. of CSE, NIT Durgapur
• CGPA of **9.15**/10 (Ranked 3rd)

B.Tech in Computer Science and Engineering 2009 - 2013
Institute of Science and Technology, Gauhati University, Assam, India
• Thesis Title: *Hierarchical Convergecasting with clustering and spanning tree generation*
• Supervisor: **Dr. Sushanta Karmakar**, Associate Professor, Dept. of CSE, Indian Institute of Technology Guwahati (IIT-G)
• Mentor: **Dr. Sandip Chakraborty**, Assistant Professor, Dept. of CSE, Indian Institute of Technology Kharagpur (IIT-KGP)
• CGPA of **9.17**/10

PAPERS UNDER REVIEW

- **Hridoy Sankar Dutta**, Udit Arora, Tanmoy Chakraborty. BlackDB – A database of blackmarket-driven collusive entities in online media.
- **Hridoy Sankar Dutta**, Siva Charan Reddy Gangireddy, Tanmoy Chakraborty. Collusion on the web: A Survey.
- Deepak Thukral, **Hridoy Sankar Dutta**, Vikram Goyal, Tanmoy Chakraborty. Catch Me if You Can: Spotting Collusive Users Involved in Blackmarket Following Services.
- **Hridoy Sankar Dutta**, Nirav Diwan, Tanmoy Chakraborty. Weakening the Inner Strength: Spotting Core Collusive Users in YouTube Blackmarket Network.
- **Hridoy Sankar Dutta**, Mayank Jobanputra, Himani Negi, Tanmoy Chakraborty. Detecting and Analyzing Collusive Entities on YouTube.

ACCEPTED / PUBLISHED PAPERS

(Type-A/A* conferences based on CORE ranking and high impact journals are highlighted in blue.)
* - Equal contribution

- Udit Arora*, **Hridoy Sankar Dutta***, Brihi Joshi, Aditya Chetan, Tanmoy Chakraborty. Analyzing and Detecting Collusive Users Involved in Blackmarket Retweeting Activities, *ACM Transactions on Intelligent Systems and Technology (TIST)*. (Impact Factor: 3.971)
- **Hridoy Sankar Dutta**, Vishal Raj Dutta, Aditya Adhikary, Tanmoy Chakraborty. HawkesEye: Detecting Fake Retweeters using Hawkes Process and Topic Modeling, *IEEE Trans. Information Forensics and Security (TIFS)*. (Impact Factor: 6.211)

- **Hridoy Sankar Dutta** and Tanmoy Chakraborty. Blackmarket-driven Collusion among Retweeters Analysis, Detection and Characterization. *IEEE Transactions on Information Forensics and Security (TIFS)*. (Impact Factor: 6.211)
- Partha Sarathi Paul, Bishakh Chandra Ghosh, **Hridoy Sankar Dutta**, Kingshuk De, Arka Prava Basu, Prithviraj Pramanik, Sujoy Saha, Sandip Chakraborty, Niloy Ganguly, Subrata Nandi. CRIMP: Here Crisis Mapping Goes Offline. *Elsevier Journal of Network and Computer Applications (JNCA)*. (Impact Factor: 5.273)
- Aditya Chetan*, Brihi Joshi*, **Hridoy Sankar Dutta***, Tanmoy Chakraborty. CoReRank: Ranking to Detect Users Involved in Blackmarket-based Collusive Retweeting Activities. *12th ACM International Conference on Web Search and Data Mining (WSDM)*, Melbourne, Australia, Feb 11-15, 2019. (Acceptance rate: 16%)
- **Hridoy Sankar Dutta**, Aditya Chetan, Brihi Joshi, Tanmoy Chakraborty. Retweet Us, We Will Retweet You: Spotting Collusive Retweeters Involved in Blackmarket Services, *IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*, Barcelona, Spain, Aug 28-31, 2018. (Acceptance rate: 15%)
- Partha Sarathi Paul, **Hridoy Sankar Dutta**, Bishakh Chandra Ghosh, Krishnandu Hazra, Sandip Chakraborty, Sujoy Saha, Subrata Nandi. Offline crisis mapping by opportunistic dissemination of crisis data after large-scale disasters, *2nd ACM SIGSPATIAL International Workshop on the Use of GIS in Emergency Management*, California, United States, Oct 31-Nov 3, 2016.
- Sandip Chakraborty, Suchetana Chakraborty, Sushanta Karmakar, **Hridoy Sankar Dutta**. Hierarchical topology adaptation for distributed convergecast applications, In *29th Annual ACM Symposium on Applied Computing*, Gyeongju, Korea, March 24-28, 2014.

JOB EXPERIENCE	Assistant Project Engineer, IIT Guwahati Project Title: <i>Developing Text to Speech System in Assamese Language Phase II</i> Supervisor: Dr. S.R.M.Prasanna, Professor, Dept. of EEE, Indian Institute of Technology, Guwahati (IIT-G) Aug, 2014 - Apr, 2015
OTHER EXPERIENCES	Short-Term Scholar, George Mason University Mentored by Dr. Hemant Purohit Assistant Professor, Information Sciences & Technology Department George Mason University June, 2019 - August, 2019 Visiting Researcher, Cardiff University Mentored by Prof. Pete Burnap Professor, School of Computer Science and Informatics, Cardiff University March 2019, March 2020 Student Researcher, ForkIT Mentored by Prof. Subrata Nandi, Dept. of CSE, NIT Durgapur & Dr. Sujoy Saha, Dept. of CSE, NIT Durgapur An End-to-end system to generate Offline Crisis maps May, 2016 - June, 2017 Summer Research Intern in DISARM Group, NIT Durgapur Mentored by Prof. Subrata Nandi, Dept. of CSE, NIT Durgapur Developed web application Admin Dashboard for Master Control Station at the time of disaster. Django, a python web framework was used to develop the application. May, 2016 - July, 2016 Winter Research Intern in DISARM Group, NIT Durgapur Mentored by Prof. Subrata Nandi, Dept. of CSE, NIT Durgapur Developed an Opportunistic Network for Android Application. Dec, 2015 - Jan, 2016 Project Intern, IIT Guwahati Mentored by Dr. Sushanta Karmakar, Dept. of CSE, IIT Guwahati Worked on the Research Topic "Hierarchical topology adaptation for distributed convergecast applications" Jan, 2013 - June, 2013

SELECTED PROJECTS

All projects are available on git : <https://www.github.com/hridaydutta123>

- **ResourceFinder** - A resource map tool created during Covid-19 to locate nearby grocery shops, hospitals and gas stations with their opening time, closing time, phone number etc.
- **Assamese2Vec** - An open source project for modeling the Assamese language.
- **Awesome Twitter Tools** - A curated list of tools, datasets, research papers and browser extensions related to Twitter.
- **The YouTube Scraper** - Download YouTube video description and video comments without using the YouTube API.
- **Collusive User Detection Tool** - A tool for detection of collusive users in online social networks.
- **Opportunistic Network for Android Application** - Implementation of communication medium for challenge network scenario.
- **Offline Master Control Station** - Implementation of reliable and effective data transfer from opportunistic network and tool for analyzing behaviour of data captured in opportunistic networks.
- **Designing TTS System in Assamese and Manipuri Languages** - It involves building systems for synthesizing natural speech in native Assamese and Manipuri tone from a given text and building user friendly GUIs for the common people.
- **MapDisarm** - Offline efficient transfer of OSM Map tiles among various devices without internet connectivity for gps based recovery in Opportunistic network.

ACHIEVEMENTS AND AWARDS

- Awarded 3rd prize for presenting my work at Ninth IDRBT Doctoral Colloquium IDC 2019.
- Awarded Student Travel Grant to attend CODS COMAD 2019.
- Grand Challenge Grade **A** winner at International Symposium on Embedded Devices (ISED) 2016 at IIT Patna.
- Came **1st Runners Up** in Startup Weekend, Kolkata (5-7th August, 2016).
- Media Coverage of our Group in a local daily: <http://aamarkatha.com/?p=1121#.WMzJSszEghE>.whatsapp
- Won **3rd Prize in Coding Competition** at Techniche 2012 (IIT Guwahati Technical Fest Coding Event).
- Attended NASSCOM Product Conclave-2016 as Student Researcher of ForkIT
- Rank of **3** in Master Of Technology and Rank of **7** in Bachelor Of Technology.
- Secured 10/10 SGPA in M.Tech (3rd & 4th Semester)
- Secured 10/10 SGPA in B.Tech (6th, 7th & 8th Semester)
- GATE Qualified (2016) **Gate Score : 488 (Rank: 4370)**
- GATE Qualified (2015) **Gate Score : 441 (Rank: 6675)**
- Recipient of GATE Scholarship (2014) **Gate Score : 582 (Rank: 2139)**
- Passed 'A' level examination of National Cadet Corps (NCC).

PROFESSIONAL SERVICES

- International Conference on Natural Language Processing (ICON-2020) (Reviewer)
- IEEE International Conference on Advanced Networks and Telecommunications Systems (IEEE ANTS 2020) (Reviewer)
- International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT 2020) (Reviewer)
- AAAI Workshop on Combating Online Hostile Posts in Regional Languages during Emergency Situation (CONSTRAINT 2021) (Web Chair)
- SDM 2021: SIAM International Conference on Data Mining (SIAM 2020) (Reviewer).
- ACM International Conference on Information and Knowledge Management (CIKM 2020) (Reviewer).
- PAKDD Workshop on Data Science for Fake News (DSFN 2020) (Web Chair and Reviewer).
- Wiley Journal on Expert Systems (Reviewer).
- IEEE/WIC/ACM International Conference on Web Intelligence (WI 2019) (External Reviewer).

- International Conference on Secure Knowledge Management in Artificial Intelligence Era (SKM 2019) (External Reviewer).

EVENTS & WORKSHOPS ATTENDED

- Amazon Research Days, Bangalore (2019)
- Academic Research Summit 2019 on Data Science and AI, IIT Madras, Chennai (2019)
- ACM India Joint International Conference on Data Science and Management of Data (CoDS-COMAD 2019)
- Winter School on Artificial Intelligence, IIIT Delhi (2019)
- Amazon Research Days, Bangalore (2018)
- Young Scientist Conference at India International Science Festival (2018)
- Workshop on Complex and Social Networks, IIT Kharagpur (2017)
- NASSCOM Product Conclave, Bangalore (2016)

TECHNICAL SKILLS

Strongest Areas - Social Network Analysis, Data Mining, Applied Machine Learning, Web Mining, Natural Language Processing & System Programming, Web Technology.
Languages - Python, Java, PHP, Dart, C++, UNIX Shell, HTML, CSS, JS, Ajax, Perl
Frameworks - Twitter API Clients, NLTK, Sklearn, Gensim, Django, Flask, Flutter
Tools - Git, Android Studio, Adobe Photoshop, JUnit, L^AT_EX
Databases - Firebase, MySQL, SQLite, MongoDB

PERSONAL DETAILS

Date of Birth: 12th September, 1991
Gender: Male
Nationality: Indian

REFERENCES

Dr. Tanmoy Chakraborty <tanmoy@iiitd.ac.in>, Asst. Professor, Dept. of CSE, IIIT Delhi
Dr. Sandip Chakraborty <sandipc@cse.iitkgp.ac.in>, Asst. Professor, Dept. of CSE, IIT Kharagpur
Prof. Subrata Nandi <subrata.nandi@cse.nitdgp.ac.in>, Professor, Dept. of CSE, NIT Durgapur
Dr. Bibhash Sen <bibhash.sen@cse.nitdgp.ac.in>, Assoc. Professor, Dept. of CSE, NIT Durgapur