

Hridoy Sankar Dutta

JOB EXPERIENCE	Research Associate, University of Cambridge <i>Cambridge Cybercrime Centre</i> <i>University of Cambridge</i>	June 2021 - Present
	Research Assistant, University of Cambridge <i>Cambridge Cybercrime Centre</i> <i>University of Cambridge</i>	February 2021 - June 2021
	Short-Term Scholar, George Mason University <i>Supervisor: Dr. Hemant Purohit, Associate Professor, Information Sciences & Technology Department</i> <i>George Mason University (GMU)</i>	June 2019 - August 2019
	Assistant Project Engineer, IIT Guwahati Project Title: <i>Developing Text to Speech System in Assamese Language Phase II</i> Supervisor: Prof. S.R.M.Prasanna, Professor, Dept. of EEE, Indian Institute of Technology, Guwahati (IITG)	August 2014 - April 2015
EDUCATION	PhD in Computer Science and Engineering Indraprastha Institute of Information Technology Delhi (IIIT-D) <ul style="list-style-type: none">• Thesis Title: <i>Detecting and reasoning collusive activities in online media</i>• Supervisor: Dr. Tanmoy Chakraborty, Assistant Professor & Ramanujan Fellow, Dept. of CSE, Indraprastha Institute of Information Technology Delhi (IIIT-D), India	August 2017 - September 2021
	M.Tech in Computer Science and Engineering National Institute of Technology Durgapur, West Bengal, India <ul style="list-style-type: none">• Thesis Title: <i>An offline crisis mapping system for large-scale natural disasters</i>• 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)	2015 - 2017
	B.Tech in Computer Science and Engineering Institute of Science and Technology, Gauhati University, Assam, India <ul style="list-style-type: none">• Thesis Title: <i>Hierarchical Convergecasting with clustering and spanning tree generation</i>• Supervisor: Dr. Sushanta Karmakar, Associate Professor, Dept. of CSE, Indian Institute of Technology Guwahati (IIT-G)• Mentor: Dr. Sandip Chakraborty, Associate Professor, Dept. of CSE, Indian Institute of Technology Kharagpur (IIT-KGP)• CGPA of 9.17/10	2009 - 2013
	PATENT <ul style="list-style-type: none">• Sujoy Saha, Prithviraj Pramanik, Partha Sarathi Paul, Subrata Nandi, Kingshuk De, Bishak Chandra Ghosh, Hridoy Sankar Dutta, Tamal Mondal, Krishnendu Hazra, Indrajit Bhattacharya, Sandip Chakraborty, AN END-TO-END SYSTEM FOR OFFLINE LOCALIZED CRISIS MAPPING AND METHOD OF OPERATION THEREOF, Indian Patent, Application No: 201931050685, Filed on 09 December, 2019.	
ACCEPTED / PUBLISHED PAPERS	(Top conferences and high impact journals are highlighted in blue.) * - Equal contribution <ul style="list-style-type: none">• Hridoy Sankar Dutta, Nirav Diwan, Tanmoy Chakraborty. Weakening the Inner Strength: Spotting Core Collusive Users in YouTube Blackmarket Network, <i>16th International AAAI Conference on Web and Social Media (ICWSM)</i>. Atlanta, GA, USA, June 6-9, 2022.• Hridoy Sankar Dutta, Mayank Jobanputra, Himani Negi, Tanmoy Chakraborty. Detecting and Analyzing Collusive Entities on YouTube, <i>ACM Transactions on Intelligent Systems and Technology (TIST)</i>. (Impact Factor: 3.971)	

- **Hridoy Sankar Dutta**, Kartik Aggarwal and Tanmoy Chakraborty. DECIFE: Detecting Collusive Users Involved in Blackmarket Following Services on Twitter, *32nd ACM Conference on Hypertext and Social Media (HyperText)*, Trinity College Dublin, Ireland, 30 August – 2 September 2021.
- **Hridoy Sankar Dutta**, Udit Arora and Tanmoy Chakraborty. ABOME: A Multi-platform Data Repository of Artificially Boosted Online Media Entities, *15th International AAAI Conference on Web and Social Media (ICWSM)*, Atlanta, GA, USA, June 7-10, 2021.
- Shreyash Arya and **Hridoy Sankar Dutta**. Revealing the Blackmarket Retweet Game: A Hybrid Approach, *AAAI Workshop on Combating Online Hostile Posts in Regional Languages during Emergency Situation (CONSTRAINT)*, Feb 8, 2021.
- **Hridoy Sankar Dutta** and Tanmoy Chakraborty. Adversarial Collusion on the Web: State-of-the-art and Future Directions, *The 8th International Conference on Big Data Analytics (BDA)*. (Tutorial)
- 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.

ACHIEVEMENTS AND AWARDS

- Awarded ICWSM 2021 Scholarship.
- Selected in the Rising Stars in Data Science workshop to be organized by the Center for Data and Computing (CDAC), University of Chicago.
- Awarded 3rd prize for presenting my work at Ninth IDRBT Doctoral Colloquim 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: <https://tinyurl.com/news-coverage-disarm>
- Won **3rd Prize in Coding Competition** at Techniche 2012 (IIT Guwahati Technical Fest Coding Event).
- Rank of **3** in Master of Technology and Rank of **7** in Bachelor of Technology.
- Recipient of GATE Scholarship (2014) – **Gate Score : 582 (Rank: 2139)** .