Dipto Das

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EDUCATION

University of Colorado Boulder　　　　　　　　　　　Boulder, Colorado, United States
Ph.D. Student (Fourth year) in Information Science　　　　　　　　　　　Fall 2019 – Present
Research Area: Human-Computer Interaction
Supervisor: Dr. Bryan Semaan
Selected Courses: Race and Technology, Online Communities, Critical Technical Practice,
Recommendation Systems, Decolonizing Media, Statistical Methods in IST, Going Deep in the Literature,
Theories of Digital Technology, Sociological Theory, Social Networks, Information Visualization, Advanced
Information Organization, Research Methodologies in IST.

Missouri State University　　　　　　　　　　　Springfield, Missouri, United States
M.S. in Computer Science　　　　　　　　　　　August 2019
Thesis: A Multimodal Approach to Sarcasm Detection on Social Media
Supervisor: Dr. Anthony J. Clark
Selected Courses: Data Mining, Deep Learning, Data Visualization, Data Analytics, Advanced Multimedia,
Advanced Robotics, Computer Speech, Music and Images.

Bangladesh University of Engineering and Technology　　　　　　　　Dhaka, Bangladesh
B.S. in Computer Science and Engineering; Senior year concentration: Artificial Intelligence　　Sep 2017
Thesis: Question Difficulty Estimation on StackOverflow
Supervisors: Dr. Anindya Iqbal, Dr. Rifat Shahriyar
Selected Courses: Artificial Intelligence, Machine Learning, Pattern Recognition, Numerical Analysis, Fault
Tolerant Systems, Computer Networks, Digital Logic Design, Algorithms, Database Systems, Compiler
Design, Operating Systems.

RESEARCH INTERESTS

Human-Computer Interaction, Computer Supported Collaborative Works, Social Computing, ICTD,
Online Platforms.

PUBLICATIONS

[18] **Dipto Das**, Bryan Semaan, "Decolonial and Postcolonial Computing Research: A Scientometric
　　Exploration", ACM Conference On Computer-Supported Cooperative Work And Social Computing
　　(CSCW 2022), Virtual. DOI: 10.1145/3500868.3559468

[17] **Dipto Das**, Arpon Podder, Bryan Semaan, "A Sociomaterial Perspective on Trace Data Collection:
　　Strategies for Democratizing and Limiting Bias", ACM SIGCAS/SIGCHI Conference on Computing
　　and Sustainable Societies **(COMPASS 2022)**, Seattle, WA, USA. DOI: 10.1145/3530190.3534835
　　[Travel Grant Award]

[16] **Dipto Das**, Malay Bhattacharyya, Laura S. Gaytan-Lugo, Ebtisam Alabdulqader, Nova Ahmed,
　　"Importance of Digital Profile Pictures on Social Media Perceived by Different Groups", ACM
　　SIGCAS/SIGCHI Conference on Computing and Sustainable Societies **(COMPASS 2022)**, Seattle,
　　WA, USA. DOI: 10.1145/3530190.3534853
　　[Travel Grant Award]

[15] **Dipto Das**, Najmul Islam, Eresh Haque, Jukka Vuorinen, Syed Ishtiaque Ahmed, "Understanding the
　　Strategies and Practices of Facebook Microcelebrities for Engaging in Sociopolitical Discourses",
　　International Conference on Information and Communication Technologies and Development **(ICTD
　　2022)**, WA, USA. (to appear).
　　[Travel Grant Award]

[14] **Dipto Das**, Bryan Semaan, "Collaborative Identity Decolonization as Reclaiming Narrative Agency: Identity Work of Bengali Communities on Quora", ACM CHI Conference on Human Factors in Computing Systems **(CHI 2022)**, LA, USA. DOI: 10.1145/3491102.3517600

[13] Vikram Kamath Cannanure, Naveena Karusala, Cuauhtemoc Rivera-Loaiza, Annu Sible Prabhakar, Rama Adithya Varanasi, Anupriya Tuli, Dilrukshi Gamage, Faria Noor, David Nemer, **Dipto Das**, Susan Dray, Christian Sturm, Neha Kumar, "HCI Across Borders: Navigating Shifting Borders at CHI", CHI Conference on Human Factors in Computing Systems Extended Abstracts **(CHI 2022)**, LA, USA. DOI: 10.1145/3491101.3503706

[12] **Dipto Das**, "Decolonization through Technology and Decolonization of Technology", Doctoral Consortium in ACM International Conference on Supporting Group Work **(GROUP 2022/23)**, FL, USA. (to appear)

[11] **Dipto Das**, Carsten Østerlund, Bryan Semaan, ""Jol" or "Pani"?: How Does Governance Shape a Platform's Identity?", Proceedings of the ACM on Human-Computer Interaction, ACM Conference on Computer-Supported Cooperative Work and Social Computing **(CSCW 2021)**, Virtual. DOI:10.1145/3479860
[Best Paper Honorable Mention (top 5% submissions)], [Recognition for Diversity and Inclusion]

[10] **Dipto Das**, Bryan Semaan, "quoras: A Python API for Quora Data Collection to Increase Multi-Language Social Science Research", ACM Conference on Computer-Supported Cooperative Work and Social Computing **(CSCW 2020)**, Virtual. DOI:10.1145/3406865.3418333

[9] Abdul Kawsar Tushar, Iffat Jahan Antara, **Dipto Das**, Priyank Chandra, Tanjir Rashid Soron, Md Munirul Haque, Seikh Iqbal Ahamed and Syed Ishtiaque Ahmed, ""We Need More Power to Stand Up": Designing to Combat Stigmatization of the Caregivers of Children with Autism in Urban Bangladesh", 11th International Conference on Information and Communication Technologies and Development **(ICTD 2020)**, Ecuador. DOI:10.1145/3392561.3394643

[8] **Dipto Das**, Anthony J. Clark, "Construct of Sarcasm on Social Media Platform", IEEE International Conference on Humanized Computing and Communication **(HCC 2019)**, CA, USA. DOI:10.1109/HCC46620.2019.00023

[7] **Dipto Das**, Anthony J. Clark, "Satire vs Fake News: You Can Tell by the Way They Say It", IEEE International Conference on Transdisciplinary AI **(TransAI 2019)**, CA, USA. DOI:10.1109/TransAI46475.2019.00012

[6] **Dipto Das**, Md Forhad Hossain, Anthony J. Clark, "Understanding the Attention Model of Humans in Sarcastic Videos", IEEE International Conference on Transdisciplinary AI **(TransAI 2019)**, CA, USA. DOI:10.1109/TransAI46475.2019.00022

[5] **Dipto Das**, and Anthony J. Clark, "Sarcasm Detection on Facebook: A Supervised Learning Approach", 20th ACM International Conference on Multimodal Interaction **(ICMI 2018)**, CO, USA. DOI:10.1145/3281151.3281154
[Travel Grant Award]

[4] Sk Adnan Hossain, **Dipto Das**, Anindya Iqbal, Amiangshu Bosu, Rifat Shahriyar, and Toufique Ahmed, "SOQDE: A Supervised Approach of Stack Overflow Question Difficulty Estimation", 25th Asia Pacific Software Engineering Conference **(APSEC 2018)**, Japan. DOI:10.1109/APSEC.2018.00059

[3] Hasan Shahid Ferdous, **Dipto Das**, and Farhana Murtaza Choudhury, "Social Media Question Asking (SMQA): Whom Do We Tag and Why?", 30th Australian Conference on Computer Human Interaction **(OzCHI 2018)**, Australia. DOI:10.1145/3292147.3292173

[2] **Dipto Das**, Anthony J. Clark, "Sarcasm Detection on Flickr Using a CNN", International Conference on Computing and Big Data **(ICCBD 2018)**, SC, USA. DOI:10.1145/3277104.3277118

[1] Anurata Prabha Hridi, **Dipto Das**, Md Monowar Anjum, and Tanmay Das , "Faster Evacuation After Disaster: Finding Alternative Routes using Probable Human Behavior", 7th Annual Symposium on Computing for Development **(ACM DEV 2016)**, Kenya. DOI:10.1145/3001913.3006632

Awards & Scholarships

- University of Colorado Boulder College of Media, Communication, and Information (CMCI) Martin scholarship. 2022
- ACM-Meta (Facebook) COMPASS student travel grant [one of two awards]. 2022
- CU Boulder CMCI travel scholarship. 2022
- ACM CHI recognition for outstanding review. 2022
- ACM CSCW Best Paper Honorable Mention Award. 2021
- ACM CSCW Recognition for Diversity and Inclusion. 2021
- Fellowship from Department of Information Science, the University of Colorado Boulder. 2021
- Bangladesh-Sweden Trust Travel Grant. 2021
- New England Complex System Institute Winter School Registration Scholarship. 2020
- ACM ICMI Late Breaking Results Travel Grant. 2018
- Winner (Top three), College of Natural and Applied Sciences (CNAS) 3 Minutes Thesis Competition, Missouri State University. 2018
- Second Runner up, Youth Earthquake Preparedness Campaign organized by UNDP, A2I - Prime Ministers office, Ministry of Disaster Management and Relief - Government of the Peoples Republic of Bangladesh. 2016
- Second Runner up: Poster presentation organized by IEEE IUT student branch 2016
- Champion: Pioneros - An industry-based business case competition for engineers organized by BUET Entrepreneurship Development Club. 2016
- Champion: Humanitarian App Idea Contest organized by IEEE Bangladesh Section. 2016
- First Place: Among 8,000+ candidates in BUET Entrance Exam: Architecture unit. 2012
- National higher secondary certificate (HSC) general scholarship from the Government of Bangladesh 2012
- Winner, 6th Bangladesh Astro-Olympiad organized by Bangladesh Astronomical Association. 2011
- National secondary school certificate (SSC) general scholarship, the Government of Bangladesh 2010
- Abdus Sobhan Scholarship. Consecutive three times winner. 2008 - 2010
- Champion: Inter School National Debate Competition organized by Holy Cross Debating Club. 2008
- First Runner up, National Physics Olympiad organized by Notre Dame College. 2008
- National junior school merit scholarship (talentpool) category, the Government of Bangladesh. 2007
- Champion: National Debate Festival, Dhaka by Bangladesh Debate Federation and USAID. 2006
- Winner: Vasha-protiyog (National Language Olympiad) organized by the Prothom Alo and Dutch-Bangla Bank. 2006
- Ideal Student Award: Academic Honor by Narayanganj Ideal School, Bangladesh. 2005
- Champion (Team leader): National Debate Competition organized by Bangladesh Shishu Academy. 2005
- National elementary school merit scholarship (talentpool) category, UNICEF and the Government of Bangladesh. 2004

Skills

- **Methods:** Qualitative analysis (Interviews, Survey design, Ethnography, Trace ethnography, Thematic analysis, Grounded theory analysis), Prototyping, Wireframing, Experiment design, Quantitative analysis (Natural language processing, Computer Vision, Predictive machine learning, Social network analysis, Experiment design, Inferential statistics, Structured equation modeling).
- **Programming and Scripting Languages:** Python, R, SQL, LaTeX.
- **Libraries and packages:** Pandas, NumPy, Scikit-learn, SciPy, TensorFlow, Keras, SpaCy, NLTK, VADER, pyLDA, OpenCV, Matplotlib, SeaBorn, NetworkX, BeautifulSoup, Selenium, Nominatim, Tidyverse, Lavaan, ggplot2, iGraph.
- **Softwares:** MaxQDA, Quirkos, Gephi, Adobe Illustrator, Tableau, Weka, DBMS, Excel.

Research Experience

Al-Adala (justice, fairness, and equality): ADA Lab, University of Colorado Boulder
Graduate Research Assistant Fall 2021 – Present
- Advised by Dr. Bryan Semaan

- Dissertation work looks at how sociotechnical systems embed colonial impulses, how these systems both support and impede the identity performance and expression of colonially marginalized local and indigenous communities.
- Methods: trace ethnography, interviews, web-scrapper development, network analysis, natural language processing (NLP).
- Publication: CSCW 2022, COMPASS 2022, CHI 2022, GROUP 2022, CSCW 2021, CSCW 2020
- Faculty collaborator: Dr. Carsten Østerlund (Syracuse University), Dr. Shion Guha (University of Toronto)

Human Centered Computing and Design (HCC+D) Lab, Syracuse University
Graduate Research Assistant   Fall 2019 – Summer 2021
- Advised by Dr. Bryan Semaan
- Project: Decolonization and Technology (moved to the University of Colorado Boulder, see above for description, methods, and publications)

Research Practicum   Fall 2020–Spring 2021
- Decolonization on ICT platform: Advised by Dr. Bryan Semaan, used interview method. (Spring 2021)
- Sociomateriality of governance on Quora: Advised by Dr. Carsten Østerlund, used trace ethnography (Fall 2020)

Cognition, Computation, Communication & Complexity Lab, Syracuse University
Graduate Assistant   Fall 2020 – Summer 2021
- Advised by Dr. Josh Introne
- Project: Taking climate change as a case study, we identify transitional regions of the "belief landscape" in Twitter data sample, and illustrate how individuals with different use characteristics populate different regions of the belief landscape.
- Methods: NLP, predictive machine learning, network analysis.
- Publications: IC2S2.

Research Practicum   Fall 2019–Spring 2020
- Perception of robots among people: Mentored by Dr. Brian McKernan, used deep learning (Spring 2020)
- Dynamics of conspiracy theory online platform: Mentored by Dr. Josh Introne, used network analysis (Fall 2019)

Autonomous Robotics and Complex Systems Lab, Missouri State University
Graduate Research Assistant   Spring 2018 – Summer 2019
- Advised by Dr. Anthony J. Clark
- Project: With a mixed method study, we propose a multimodal approach to sarcasm detection using text, images, and user-reaction metadata on social media.
- Methods: Deep learning, NLP, statistical machine learning, eye-tracking.
- Publications: HCC 2019, TransAI 2019, ICMI 2018, ICCBD 2018

Bangladesh University of Engineering and Technology
Undergraduate Research Assistant   Aug 2016 – Aug 2017
- Advised by Drs. Anindya Iqbal and Rifat Shahriyar
- Project: To facilitate a question difficulty-aware point awarding system on StackOverflow, we proposed a supervised learning based Question difficulty estimation model named SOQDE based on different (pre-hoc and post-hoc) textual and contextual features.
- Methods: Predictive machine learning
- Publication: APSEC 2018

Third Space research group, University of Toronto
Student researcher (remote)   Fall 2017 – Present
- Advised by Dr. Syed Ishtiaque Ahmed, Najmul Islam
- Project: Accessibility to technology among caregivers of children with autism, Use of social media among the microcelebrities in the Global South

- Methods: Interviews, participatory design workshops
- Publications: ICTD 2022, ICTD 2020

University of Melbourne
Student researcher (remote) Fall 2018 – Present
- Mentored by Dr. Hasan Shahid Ferdous
- Project: Use of social media in the Global South
- Methods: Survey, quantitative analysis
- Publication: OzCHI 2018

TEACHING

Department of Information Science, University of Colorado Boulder
Graduate Teaching Assistant Fall 2021 – Present
- Courses taught:
  - INFO 1301: Statistics for Information Science (Fall 2022)
  - INFO 1201: Computational Reasoning 1 (Fall 2021: 160 students, Spring 2022: 140 students).
- Responsibilities include attending two recitations, helping students debug codes during theory classes, holding office hours, setting quiz questions, and grading.

Guest Speaker Fall 2022 – Present
- Courses taught:
  - INFO 4601: Ethical and Policy Dimensions of Information and Technology (Topic: Decoloniality in content moderation for online platforms)
  - INFO 5604: Applied Machine Learning (Topic: Support vector machine and its application in analyzing political tweets)

School of Information Studies, Syracuse University Syracuse, NY
Teaching Practicum Fall 2019 – Spring 2021
- Courses taught:
  - IST 649: Human Interaction with Computers (Fall 2019: 8 students).
  - IST 421: Information Visualization (Spring 2021: 33 students).
  - IST 300: Digital Platforms (Fall 2020: 20 students).
  - IST 343: Data in Society (Spring 2020: 86 students).
- Responsibilities include designing the syllabus, reading list, and assignments (IST 421, IST 300), teaching classes (IST 649, IST 421, IST 300, IST 343), preparing questions and grading online and in-class discussions (IST 343), and holding office hour (IST 649).

Department of Computer Science, Missouri State University
Graduate Teaching Assistant Spring 2018 – Spring 2019
- Courses taught:
  - CSC 130: The World of Computer Science (Fall 2018: 36+32 students, Spring 2019: 37 students)
  - CSC 131: Computational Thinking (Spring 2018: 42 students, Spring 2019: 45 students).
- Responsibilities included helping students debug codes, tutoring, and grading.

Department of CSE, Dhaka International University Dhaka, Bangladesh
Lecturer Fall 2017
- Courses taught:
  - CSE 401+402: Compiler Design (33 + 49 students)
  - CSE 301+302: Algorithm Design and Analysis (54 students)
  - CSE 209: Computer Organization and Architecture (59 students).
- Responsibilities included lecturing in theory classes (odd-numbered courses), conducting labs (even-numbered courses), grading, attending office hours.

ACADEMIC SERVICES

Program Committee Member

- AAAI   2022
- ACM CSCW   2022 (Posters)
- ACM CHI   2022 (Late breaking works)
- ICTD   2022
- ACM SIGCAS COMPASS   2021 (Shadow)

Reviewer: Conferences
- ACM CHI (outstanding review recognition)   2022
- ACM CSCW   2022, 2021
- ICTD   2022
- ACM Interaction Design and Children (IDC)   2021
- Australian Conference on Human-Computer Interaction (OzCHI)   2020
- ACM CHI PLAY   2020

Reviewer: Journals
- International Journal of Human - Computer Studies, Elsevier   2022
- IEEE Access   2022
- Technology in Society, Elsevier   2020

Student volunteer
- ACM SIGCHI/SIGCAS COMPASS   2022
- ICTD   2022
- ACM DIS   2022
- ACM CHI   2022
- ACM CSCW   2021

Member
- International students' chair, Graduate Students Association, Department of Information Science,
  University of Colorado Boulder   2022 – Present
- Association for Computing Machinery (ACM)   2021 – Present
- ACM Special Interest Group on Computer-Human Interaction (SIGCHI) 2022 – Present

Invited Talk
- Social Media Influencers Conference (SMIC), University of Michigan   2022

Organizer
- HCI Across Borders (HCIxB) Workshop   2022
- SMIC, University of Michigan   2022 (Student session)

CERTIFICATIONS

- Winter School on Complex Systems, New England Complex System Institute   2020
- Design Thinking: Data Intelligence, LinkedIn Learning   2019
- Natural Language Processing (NLP), Microsoft - edx   2018
- QA Workshop on Teaching-Learning Methods and Curriculum Contents, Institutional Quality Assurance
  Cell, Bangladesh   2017

MEDIA COVERAGE

- **Decoloniality in computing: an interview with Dipto Das**, XRDS: Crossroads, The ACM
  Magazine for Students. [Summer 2022 (Volume 28, Issue 4)]
- **Pioneros 2016: Engineers take on the corporate world**, The Daily Star (the most circulated
  English newspaper in Bangladesh). [Nov 11, 2016]

REFERENCES

- **Dr. Bryan Semaan** (bryan.semaan@colorado.edu), Department of Information Science, University of Colorado Boulder.
- **Dr. Carsten Østerlund** (costerlu@syr.edu), School of Information Studies, Syracuse University.
- **Dr. Syed Ishtiaque Ahmed** (ishtiaque@cs.toronto.edu), Department of Computer Science, University of Toronto.