

# Sanorita Dey

Dept. of Computer Science and Electrical Engg.  
University of Maryland Baltimore County  
357 ITE Building  
1000 Hilltop Circle  
Baltimore, MD 21250

sanorita@umbc.edu  
<https://www.csee.umbc.edu/~sanorita>

## Research Interest

**Core:** Cognitive dissonance, Biased assimilation, Persuasion theory, Change of belief, Spatial learning, Mental mapping

**Application:** Social computing, Socio-political platforms, Crowdsourcing and Crowdfunding, Advertising and campaign management, Cognitive mobile app

## Current Appointment

**Assistant Professor**, Aug 2020 - present  
Dept. of Computer Science and Electrical Engineering  
University of Maryland Baltimore County

## Education

**PhD**, Computer Science, 2020  
University of Illinois at Urbana-Champaign  
Advisor: Prof. Karrie Karahalios

**Master of Science**, Computer Science and Engineering, 2013  
University of South Carolina  
Advisor: Prof. Srihari Nelakuditi  
(**Outstanding Thesis Award**)

**Bachelor of Engineering**, Computer Science and Technology, 2007  
IEST (formerly B.E. College)  
Advisor: Prof. Sekhar Mandal  
(**Graduated with Honors**)

## Selected Honors

- Maria Pia Gratton International Fellowship, 2019
- “Top-5 paper” at SUI, 2019
- Dissertation Completion Fellowship, 2018
- Best Paper Honorable Mention Award at CHI, 2018
- Adobe Digital Marketing Research Award, 2016
- Outstanding thesis award for MS thesis, 2014
- SPARC Graduate Fellowship Award, 2013 presented by the Office of Vice President for Research, 2013
- Best poster award in HotMobile 2013
- 18th rank out of around 2,00,000 students in the board exam of 12th standard

## Publication

Fishing for Validation: Understanding Promises and Challenges of a Private Social Media Group for COVID-19 Long-Hauler Patients  
**Abhinav Reddy Karra**, Ranjan Jaiswal, Sanorita Dey  
CSCW 2022: ACM Computer-Supported Cooperative Work and Social Computing

It Is All About Criticism: Understanding the Effect of Social Media Discourse on Legal Crowdfunding Campaigns

**Sanorita Dey**, Brittany Duff, Karrie Karahalios

CSCW 2022: ACM Computer-Supported Cooperative Work and Social Computing

Computational Understanding of Narratives: A Survey

**Priyanka Ranade**; Sanorita Dey, Anupam Joshi, Tim Finin

IEEE Access 2022

Re-imagining the Power of Priming and Framing Effects in the Context of Political Crowdfunding Campaigns

**Sanorita Dey**, Brittany Duff, Karrie Karahalios

CHI 2022: ACM Human Factors in Computing Systems

Interpretable Explanations for Probabilistic Inference in Markov Logic

**KM Al Farabi**, S Sarkhel, S Dey, D Venugopal

2021 IEEE International Conference on Big Data (Big Data)

Recommendation for Video Advertisements based on Personality Traits and Companion Content

**Sanorita Dey**, Brittany Duff, Niyati Chhaya, Wai Fu, Vishy Swaminathan, Karrie Karahalios

IUI 2020: ACM International Conference on Intelligent User Interfaces

VidLyz: An Interactive Approach to Assist Novice Entrepreneurs in Making Persuasive Campaign Videos

**Sanorita Dey**, Brittany Duff, Wai-Tat Fu, Karrie Karahalios

CSCW 2019: ACM Computer-Supported Cooperative Work and Social Computing

Understanding the Effect of the Combination of Navigation Tools in Learning Spatial Knowledge

**Sanorita Dey**, Wai-Tat Fu, Karrie Karahalios

SUI 2019: ACM Spatial User Interaction

★ Top-5 Papers

Effects of Socially Stigmatized Crowdfunding Campaigns in Shaping Opinions

**Sanorita Dey**, Karrie Karahalios, Wai-Tat Fu

CHI 2018: ACM Human Factors in Computing Systems

★ Best Paper Honorable Mention Award

Getting There and Beyond: Incidental Learning of Spatial Knowledge with Turn-by-Turn Directions and Location Updates in Navigation Interfaces

**Sanorita Dey**, Karrie Karahalios, Wai-Tat Fu

SUI 2018: ACM Spatial User Interaction

Fine-Grained Explanations using Markov Logic

Khan Mohammad Al Farabi, Somdeb Sarkhel, **Sanorita Dey**, Deepak Venugopal

ECMLPKDD 2019: The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases

Understanding the Effects of Endorsements for Scientific Crowdfunding

**Sanorita Dey**, Karrie Karahalios, Wai-Tat Fu

CHI 2017: ACM Human Factors in Computing Systems

The Art and Science of Persuasion: Not All Crowdfunding Campaign Videos Are The Same

**Sanorita Dey**, Brittany Duff, Karrie Karahalios, Wai-Tat Fu

CSCW 2017: ACM Computer-Supported Cooperative Work and Social Computing

A scalable online platform for evaluating and training visuospatial skills of engineering students

Z. Xiao, Y. Yao, C. Yen, **Sanorita Dey**, H. Wauck, J. Leake, B. Woodard, A. Wolters, W. Fu

ASEE 2017: Annual Conference of the American Society of Engineering Education

AccelPrint: Imperfections of Accelerometer Make Smartphones Trackable

**Sanorita Dey**, Nirupam Roy, Wenyuan Xu, Romit Roy Choudhury, Srihari Nelakuditi

NDSS 2014: Annual Network and Distributed System Security Symposium

**Extended  
Abstract  
& Workshop  
Papers**

Understanding the Effect of the Combination of Navigation Tools in Learning Spatial Knowledge

**Sanorita Dey**, Wai-Tat Fu, Karrie Karahalios

UIST 2019: ACM Symposium on User Interface Software and Technology

Videolyzer: An Interactive Platform for Making Videos Persuasive

**Sanorita Dey**

IUI 2017: ACM International Conference on Intelligent User Interfaces

Know your Surroundings with an Interactive Map

**Sanorita Dey**

IUI 2015: ACM International Conference on Intelligent User Interfaces

Study the Effect of Allocentric and Egocentric Interfaces in Indoor Navigation

**Sanorita Dey**, John Lee, Karrie Karahalios, Wai-Tat Fu

HCI Consortium 2014

Leveraging Imperfections of Sensors for Fingerprinting Smartphones

**Sanorita Dey**, Nirupam Roy, Wenyuan Xu, Srihari Nelakuditi

HotMobile 2013: International Workshop on Mobile Computing Systems and Applications

Mitigating Distractions from Smartphones

Connor Bain, **Sanorita Dey**, Romit Roy Chowdhury, Srihari Nelakuditi

HotMobile 2013: International Workshop on Mobile Computing Systems and Applications

**Teaching  
Experience**

**Instructor**

- Social and Crowd Computing (CMSC 691/ CMSC 491)  
Spring 2021, Spring 2022
- Data Structures (CMSC 341)  
Fall 2021 2021, Fall 2022
- Social/Ethical Issues in Information Technology (CMSC 304)  
Fall 2020

**Tutorial/Workshop**

- Designing user-centric applications

March, 2015

- Wearable/handheld device programming Oct, 2013
- Sensor augmented app development Oct, 2013

**Guest Lecture**

Investigating the effect of stigma in crowdfunding platforms

**Course:** Social Visualization (CS 467)

Fall 2018

**Prototype Development**

**Indoor Navigation App for Cognitive Spatial Learning**

An customizable indoor navigation application to study the effect of navigation cues in acquiring incidental spatial knowledge

**Online Sketching Tool for Visuo-Spatial Skill Evaluation**

An online grid-based free-hand sketching tool to test and record visuo-spatial skill

**VidLyz: A tool for making persuasive videos**

An online interactive tool that allows users to explore the implications of audience-engagement persuasion factors in the context of campaign videos through contrasting examples, crowd-sourced subjective feedback on engagement factors

**Diversity Leadership**

Organized N2Women (Networking Networking Women) workshop at MobiHoc 2012 to encourage diversity and foster connections among under-represented women in computing

Guest speaker at the seminar organized by Women in Computer Science (WCS), UIUC to present the prospect of graduate study in HCI at UIUC

**Industry Experience**

**Adobe Systems Incorporated**

Data Science Research Intern

Spring 2018

**Cognizant Technology Solutions**

Associate Projects

Spring 2011

**Tata Consultancy Services**

System Engineer (British Telecom)

Fall 2007 - Fall 2010

**Activities**

- Program committee member at CHI and CSCW
- Invited reviewer at CHI, CSCW, CogSci, ICWSM
- Web Chair, ICHI 2016
- Organizer of N2Women workshop at MobiHoc 2012
- Reviewer of the Graduation Day, 2012
- Volunteer at 'Illini Fighting Hunger' initiative for underprivileged children, 2017
- Leader of the Physical Activity course at the High School