Danaja Maldeniya

University of Michigan
3340 North Quad
105 S. State St.
Ann Arbor, MI 48108
Mobile: (734)-926-6380

Email: dmal@umich.edu
Website: dmaldeniya.com

Research Interests

I'm interested in understanding the mechanisms that support sustainable large-scale collaboration dynamics. In particular, I am exploring the interactions between mechanisms at different scales of behavior, such as individuals, teams, and the community, and linking them to outcomes. I use a computational social science approach which combines theory driven frameworks with innovative computational methods from network analysis and causal modeling among others, that leverage large-scale observational datasets.

Education

PhD in Information Science 2016 - 2023 (Expected)
University of Michigan
- Advisor: Daniel Romero

BSc. in Computer Science & Engineering (First Class) 2011
University of Moratuwa, Sri Lanka

Experience

Research Intern May 2020 - Aug 2020
USC Information Sciences Institute Los Angeles, CA

Research Assistant Jan 2018 -
University of Michigan, School of Information Ann Arbor, MI

Graduate Student Instructor Sep 2017 Dec 2017
University of Michigan, School of Information Ann Arbor, MI
- SI 301 - Models of Social Information Processing

Research Intern Jun 2017 - Aug 2017
Bell Laboratories, Social Dynamics Team Cambridge, UK

Research Assistant Sep 2016 - May 2017
University of Michigan, School of Information Ann Arbor, MI

Research Fellow Aug 2016 - present
LIRNEasia Colombo, Sri Lanka

Senior Researcher Apr 2015 - Aug 2016
LIRNEasia, Big Data for Development Team Colombo, Sri Lanka

Researcher Apr 2014 - March 2015
LIRNEasia, Big Data for Development Team Colombo, Sri Lanka

Senior Software Engineer Jan 2014 - Apr 2015
CodeGen International Colombo, Sri Lanka

Software Engineer Dec 2011 - Dec 2013
CodeGen International Colombo, Sri Lanka

Selected Publications

J. Jiang, **D. Maldeniya**, K. Lerman, and E. Ferrara. "The Wide, the Deep, and the Maverick:Types of Players in Team-based Online Games".Proc. ACM Hum.-Comput. Interact.5, CSCW, 2021

D. Maldeniya, C. Budak, L. Robert, and D.M. Romero."Herding a Deluge of Good Samaritans: How GitHub Projects Respond to Increased Attention." Proc. of The Web Conference (WWW), 2020.

J.E. Blumenstock, **D. Maldeniya**, and S. Lokanathan. "Understanding the Impact of Urban Infrastructure:New Insights from Population-Scale Data". The 9th IEEE/ACM International Conference on Information and Communication Technologies and Development (ICTD), 2017

D. Maldeniya, A. Varghese, T. Stuart, and D.M. Romero. "The Role of Optimal Distinctiveness and Homophily in Online Dating." Proc. 11th International AAAI Conference on Web and Social Media (ICWSM), 2017

R. Samarajiva, S. Lokanathan, K. Madhawa, G. Kriendler, **D. Maldeniya**, "Big data to improve urban planning", Economic and Political Weekly, Vol. L, No. 22, 2015.

Other Publications

D. Maldeniya, A. Kumarage, S. Lokanathan, G. Kriendler, K. Madhawa, "Where did you come from? Where did you go? Robust policy relevant evidence from mobile network big data", CPRSouth, 2015.

K. Madhawa, S. Lokanathan, **D. Maldeniya**, R. Samarajiva,"Using mobile network data for land use classification", CPRSouth, 2015.

K. Madhawa, S. Lokanathan, R. Samarajiva, **D. Maldeniya**, "Understanding communities using mobile network big data", CPRSouth, 2015.

D. Maldeniya, S. Lokanathan, A. Kumarage, "Origin-Destination matrix estimation for Sri Lanka using mobile network big data", 13th International Conference on Social Implications of Computers in Developing Countries, 2015.

K. Madhawa, S. Lokanathan, **D. Maldeniya**, R. Samarajiva, "Land use classification using call detail records" (Poster Abstract), NetMob, 2015.

N. de Silva, A. Perera, **D. Maldeniya**, "Semi-supervised Algorithm for Concept Ontology Based Word Set Expansion", International Conference on Advances in ICT for Emerging Regions(ICTER), 2013.

Scholarly Presentations

"'Ties That Bind: Influence of Online Social Capital on Relocation Choice after Disasters", IC2S2 2022

"How GitHub Projects Respond to Increased Attention", IC2S2 2020

"Herding a Deluge of Good Samaritans: How GitHub Projects Respond to Increased Attention.", MIDAS Symposium 2020

"Psychological Response of Communities affected by Natural Disasters in Social Media", UMTweetCon2019

"Psychological Response of Communities affected by Natural Disasters in Social Me-

dia", MIDAS Symposium 2018 (Award for Most Innovative Use of Data)

Professional Service

Reviewing: IC2S2 2022, CSCW 2022, ICWSM 2022, WebScience (WWW) 2021, CSCW 2021, ICWSM 2021, EPJ Data Science, IC2S2 2020, ICWSM 2020, WWW 2020, WSDM 2020, ICDM 2020, Nature Scientific Reports, WWW 2018, WSDM 2018

Mentoring: Kaifeng Chen (Masters Student), Stella Choi (Masters Student), Jiaxin Ye (Undegraduate Student), Eric Lian (Undergraduate Student)

Teaching Experience

Graduate Student Instructor July 2022
University of Michigan, School of Information Ann Arbor, MI
- SIADS 516: Big Data: Scalable Data Processing

Graduate Student Instructor May 2022
University of Michigan, School of Information Ann Arbor, MI
- SIADS 652: Network Analysis

Graduate Student Instructor Jan 2022 - April 2022
University of Michigan, School of Information Ann Arbor, MI
- CMPLXSYS 251: Computational Social Science

Graduate Student Instructor Sep 2021 - Dec 2021
University of Michigan, School of Information Ann Arbor, MI
- SI 618: Data Manipulation and Analysis

Graduate Student Instructor Sep 2017 - Dec 2017
University of Michigan, School of Information Ann Arbor, MI
- SI 301: Models of Social Information Processing