

# Lydia Manikonda

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<https://lmanikon.github.io/>

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EXPERIENCE	<b>Assistant Professor,</b> Lally School of Management, Rensselaer Polytechnic Institute, Troy, NY	Fall 2019 – <i>Present</i>
	<b>Course Instructor – CSE 494/598 Information Retrieval,</b> Arizona State University, Tempe, AZ	Spring 2016
	<b>Research Intern,</b> IBM T. J. Watson Research Center, Yorktown Heights, NY	Summer 2016
	<b>Research Intern,</b> Microsoft Research, Redmond, WA	Summer 2015
	<b>Research Engineer,</b> Kyungpook National University, Daegu, South Korea	Summer 2012
	<b>Research Intern,</b> University of Minnesota, Twin Cities, MN	January 2011 – December 2011
	<b>Research Intern,</b> University of Sydney, Sydney, Australia	Summer 2008
	<b>Research Assistant</b> <ul style="list-style-type: none"><li>• Arizona State University, Tempe, AZ</li><li>• IIIT-Hyderabad, Hyderabad, India</li></ul>	Fall 2013 – Summer 2019 Fall 2008 – Fall 2010
EDUCATION	<b>Ph.D. Computer Science,</b> Arizona State University, Tempe, Arizona Advisor: <i>Prof. Subbarao Kambhampati</i> ( <a href="mailto:rakaposhi.eas.asu.edu">rakaposhi.eas.asu.edu</a> )	2019
	<b>M.S. Computer Science and Engineering,</b> International Institute of Information Technology, Hyderabad, India	2012
	<b>B.Tech (Hons) Computer Science and Engineering,</b> International Institute of Information Technology, Hyderabad, India	2009
CURRENT FUNDING AWARDS	1. NSF IUCRC – Center for Research toward Advancing Financial Technologies (CRAFT). Full Grant: High Dimensional Portfolio Design and Optimization using an Explainable Ensemble Learning Framework. L. Manikonda (PI), C. Edirisinghe (Co-PI). \$100,000. 06/01/2022 to 05/31/2023.	
PUBLICATIONS	[1] Yelena Mejova <sup>1</sup> , <b>Lydia Manikonda</b> <sup>1</sup> “Comfort Foods and Community Connectedness: Investigating Diet Change during COVID-19 using YouTube Videos on Twitter”, <i>ICWSM</i> , 2023 [2] Joseph Sebastian, <b>Lydia Manikonda</b> , “Investigating Privacy Paradox in the Context of Voice-based AI Systems”, <i>TREO, Americas Conference on Information Systems (AMCIS)</i> , 2022. [3] <b>Lydia Manikonda</b> , Mee Young Umm, and Rui Fan, “Shift of User Attitudes about Anti-Asian Hate on Reddit Before and During COVID-19”, <i>ACM Web Science Conference (WebSci)</i> , 2022. [4] Nay Aungwin Zaw, <b>Lydia Manikonda</b> , “Linguistic Analysis of User Disclosures about Smoking Addiction during COVID-19 via Reddit”, <i>Data Challenge at ICWSM</i> , 2022. [5] <b>Lydia Manikonda</b> , Dorit Nevo, Benjamin D. Horne, Clare Arrington, and Sibel Adali, “The Reasoning behind Fake News Assessments: A Linguistic Analysis”, <i>AIS Transactions on Human-Computer Interaction (Special issue on Fake News and Deception)</i> , 2022.	

- [6] Yufei Wu, Thilanka Munasinghe, **Lydia Manikonda**, and Oshani Seneviratne, “Data-driven Analysis of Remote Work in China during the COVID-19 Pandemic”, *In Proceedings of the 55th Hawaii International Conference on System Sciences*, 2022.
- [7] Niharika Jain, Alberto Olmo, Sailik Sengupta, **Lydia Manikonda**, Subbarao Kambhampati, “Imperfect ImaGANation: Implications of GANs Exacerbating Biases on Facial Data”, *Artificial Intelligence (AIJ) Journal*, 2021.
- [8] Niharika Jain, Alberto Olmo, Sailik Sengupta, **Lydia Manikonda**, Subbarao Kambhampati, “Imperfect ImaGANation: Implications of GANs Exacerbating Biases on Facial Data”, *SDG Workshop, ICLR*, 2021.
- [9] Benjamin D. Horne, Dorit Nevo, Sibel Adali, **Lydia Manikonda**, and Clare Arrington, “Tailoring Heuristics and Timing AI Interventions for Supporting News Veracity Assessments”, *Computers in Human Behavior Reports*, 2020.
- [10] Brendan Cunha, **Lydia Manikonda**, “An RNN-based Classifier to detect Misinformation in News Articles”, *ICWSM Data Challenge: Safety*, 2020.
- [11] **Lydia Manikonda**, Shailesh Divey, “Reddit: A Novel Online Financial Consultancy”, *The AAAI-20 Workshop on Knowledge Discovery from Unstructured Data in Financial Services (KDF)*, 2020.
- [12] Niharika Jain, **Lydia Manikonda**, Alberto Olmo Hernandez, Sailik Sengupta, and Subbarao Kambhampati, “Imagining an Engineer: On GAN-Based Data Augmentation Perpetuating Biases”, *arXiv preprint arXiv:1811.03751*, 2018.
- [13] **Lydia Manikonda**, Subbarao Kambhampati, “Tweeting AI: Perceptions of Lay vs Expert Twitterati”, *The International Conference on Weblogs and Social Media (ICWSM)*, 2018.
- [14] Nur Kamarudin, Vineeth Rakesh, Ghazaleh Beigi, **Lydia Manikonda**, Huan Liu, “A Study of Reddit – Users Response to Rape”, *ASONAM*, 2018.
- [15] **Lydia Manikonda**, Ghazaleh Beigi, Huan Liu, Subbarao Kambhampati, “#metoo through the Lens of Social Media”, *SBP-BRIMS*, 2018.
- [16] **Lydia Manikonda**, Aditya Deotale, Subbarao Kambhampati, “What’s up with Privacy?: User Preferences and Privacy Concerns in Intelligent Personal Assistants”, *AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society*, 2018.
- [17] **Lydia Manikonda**, Shirin Sohrabi, Biplav Srivastava, Kartik Talamadupula, Subbarao Kambhampati, “Extracting Incomplete Planning Action Models from Unstructured Social Media Data to Support Decision Making”, *Workshop on Knowledge Engineering for Planning and Scheduling, ICAPS*, 2017.
- [18] **Lydia Manikonda**, Tathagata Chakraborti, Kartik Talamadupula, Subbarao Kambhampati, “Herd-ing the Crowd: Using Automated Planning for Better Crowdsourced Planning”, *Human Computation Journal Vol 4, No 1* 2017.
- [19] **Lydia Manikonda**, Munmun De Choudhury, “Modeling and Understanding Visual Attributes of Mental Health Disclosures in Social Media”, *ACM CHI Conference on Human Factors in Computing Systems (CHI)*, 2017.
- [20] **Lydia Manikonda**, Tathagata Chakraborti, Kartik Talamadupula, Subbarao Kambhampati, “Herd-ing the Crowd: Using Automated Planning for Better Crowdsourced Planning”, *Human Computation Journal*, 2017.
- [21] Ece Kamar, **Lydia Manikonda**, “Complementing the Execution of AI Systems with Human Computation”, *AAAI Workshop on Crowdsourcing, Deep Learning and Artificial Intelligence Agents*, 2017.
- [22] **Lydia Manikonda**, Vamsi Meduri, Subbarao Kambhampati, “Tweeting the Mind and Instagramming the Heart: Exploring Differentiated Content Sharing on Social Media”, *The International Conference on Weblogs and Social Media (ICWSM)*, 2016.
- [23] **Lydia Manikonda**, Heather Pon-Barry, Subbarao Kambhampati, Eric Hekler, David W. McDonald,

“Venting Weight: Analyzing the Discourse of an Online Weight Loss Forum”, *The 3rd International Workshop on the World Wide Web and Population Health Intelligence (AAAI-W3PHI)*, 2016.

- [24] **Lydia Manikonda**, Tathagata chakraborti, Sushovan De, Kartik Talamadupula, Subbarao Kambhampati, “AI-MIX: How a Planner Can Help Guide Humans Towards a Better Crowdsourced Plan”, *Conference on Human Computation & Crowdsourcing (HCOMP) WIP Track*, 2014.
- [25] Yuheng Hu, **Lydia Manikonda**, Subbarao Kambhampati, “What We Instagram: A First Analysis of Instagram Photo Content and Users”, *The International Conference on Weblogs and Social Media (ICWSM)*, 2014 [Featured on *Wired*, *abcnews*].
- [26] **Lydia Manikonda**, Usha Kumar, Shashi Shekhar, “A Facebook Application for Improving Disaster Management”, *Grace Hopper Conference for Women in Computing*, 2012.
- [27] Shashi Shekhar, KwangSoo Yang, Venkata M.V. Gunturi, **Lydia Manikonda**, Dev Oliver, Xun Zhou, Betsy George, Sangho Kim, Jeffrey M. R. Wolff, Qingsong Lu, “Experiences with Evacuation Route Planning Algorithms”, *International Journal of Geographical Information Science (IJGIS)*, 2012.
- [28] Ashish Garg, **Lydia Manikonda**, Shashank Kumar, Vikrant Krishna, Shyam Boriah, Michael Steinbach, Vipin Kumar, Durga Toshniwal, Christopher Potter, Steven Klooster, “A Model-Free Time Series Segmentation Approach for Land Cover Change Detection”, *NASA Conference on Intelligent Data Understanding (CIDU)*, 2011.
- [29] **Lydia Manikonda**, Raghvendra Mall, Vikram Pudi, Raghunath Rao, “Mining Nutrition Survey Data”, *IEEE Symposium on Computational Intelligence and Data Mining*, Paris, France, April 2011.
- [30] **Lydia Manikonda**, Ashish Mangalampalli, Vikram Pudi, “UACI: Uncertain Associative Classifier for Object Class Identification”, *The 25<sup>th</sup> International Conference of Image and Vision Computing*, New Zealand, November 2010.
- [31] **Lydia Manikonda**, Annu Tuli, Vikram Pudi, “ProMax: A Profit Maximizing Recommendation System for Market Baskets”, *SIGAI Workshop on Emerging Research Trends in AI*, 2010.
- PATENTS [32] **Lydia Manikonda**, Shirin Sohrabi, Biplav Srivastava, Kartik Talamadupula, “Learning Personalized Actionable Domain Models” Pub.No: US 2018/0285770 A1, Pub.Date: Oct.4,2018.
- [33] **Lydia Manikonda**, Shirin Sohrabi, Biplav Srivastava, Kartik Talamadupula, Anton Riabov, Deepak Turaga, “Autonomous learning of actionable models from unstructured data” Pub.No: US 2018/0218270 A1, Pub.Date: Aug.2, 2018.
- BOOK CHAPTERS [34] Nur Shazwani Kamarudin, Ghazaleh Beigi, **Lydia Manikonda**, Huan Liu, “Social Media for Mental Health: Data, Methods, and Findings”, *Open Source Intelligence and Cyber Crime (Social Media Analytics)*, 195-220, Springer Link, 1st ed. 2020.
- MEDIA MENTIONS
- Seeking a Moral Compass in the Digital Age ([URL](#))
  - Discussing COVID-19 and Unemployment on Spectrum News ([URL](#))
  - "Why Not Change the World?" RPI Podcast on Social Media and Artificial Intelligence ([URL](#))
  - Twelve Christian Women in Science You Should Know ([URL](#)) by Christianity Today
  - AI and Machine Learning in the context of Privacy – State Press – Arizona State University ([URL](#))
  - The Best of the Physics arXiv – MIT Technology Review ([URL](#))
  - Article on AI expertise and Twitter – Network World ([URL](#))
  - Write up on our Instagram research – ABC news ([URL](#))
  - Article on our Instagram research – Wired ([URL](#))
- AWARDS
- RPI’s **Board of Trustees Celebration of Faculty Achievement Award** – December 2022.
  - Best **reviewer award** ICWSM 2019.
  - People’s Choice award for **Best Demonstration**, ICAPS 2014.
  - Recipient of **Anita Borg Institute Scholarship** 2015, 2011.

- **Full travel support** to attend Doctoral Consortium at ICAPS-2014, HCOMP-2014.
- Recipient of **University Graduate Fellowship Award** for Fall-2013, Spring-2014 and Summer-2014, Arizona State University.
- Google-India **Woman in Engineering Award** 2011.
- Listed in the **Dean's Merit List** at IIIT-H for the academic performance in Fall-2007, Spring-2008.
- Recipient of **Special Mention Award**-2009 from IIIT-H for organizing research activities from 2007-2009.

#### ADVISING

1. **Current Doctoral Students:** Joseph Sebastian, Bradley Morton
2. **Current Masters and Undergrad Students:** Nay Zaw Aung Win, Noah Kader, Shuhan Li
3. **Past:** Shailesh Divey, Joshua Graham, Junxiong Tang, Aditya Deotale, Cameron Dudley

#### SKILLSET

**Programming Languages** C, C++, JAVA, Python, Matlab, R

**Techniques** MySQL, Tableau, Javascript, HTML, PHP, WEKA, multiple deep learning Python packages

#### SERVICE

Served on an NSF panel.

**Organizer/Chair** – *Scientific Discovery with AI*

Diversity Series Workshop at **AAAI-2021** (<https://sites.google.com/view/ai4be>)

**Senior Program Committee member** ICWSM, WebScience

**Program Committee member** WebConf, NAACL-HLT, ACL, ASONAM, SDM

**Journal Reviewer** Transactions on the Web, Transactions on Social Computing

**Data Analyst for IJCAI 2016**

**Volunteer Map Editor with USGS**

PROFESSIONAL MEMBERSHIPS **ACM, AAAI, AIS**