

Ramaravind Kommiya Mothilal

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Research Interests

I'm primarily interested in studying fairness in socio-technical systems and in building rigorous foundations for the design of end-to-end fair data systems, from data collection to deployment.

Education

MSc in Artificial Intelligence

Sep 2016 - Feb 2018

KU Leuven, Belgium

Percentage: 76.81% (Magna Cum Laude)

Thesis: Statistical Modeling of Students' Performance in an Open-Admission Bachelor Program in Flanders - The need to discriminate between explanatory and predictive modeling

B.Tech in Instrumentation and Control Engineering

Jul 2011 - May 2015

NIT Trichy, India

CGPA: 8.1/10 (First Class)

Research Experience

AI Centre Fellow

Jan 2019 – Feb 2021

Microsoft Research India | Centre for Societal impact through Cloud and Artificial Intelligence

Mentors: Amit Sharma and Joyojeet Pal

Research Intern

Jul 2018 – Dec 2018

Microsoft Research India | Technology for Emerging Markets group

Mentor: Amit Sharma

Research Intern

May 2014 – Jul 2014

Indian Institute of Science (IISc) | Computational Intelligence Lab

Mentor: SN Omkar

Industry Experience

Data Scientist

Mar 2021 – present

Everwell Health Solutions, Bangalore, India

Analyst

Jul 2015 – Jul 2016

Royal Bank of Scotland (RBS), Chennai, India | Data Archival Team

Verified Certification

Data Analysis for Social Scientists - Grade: 91%

Feb 2018 - Jun 2018

Massachusetts Institute of Technology on edX, Inc. (MOOC platform)

Publications

Referred Conference Publications

1. **Ramaravind Kommiya Mothilal**, Divyat Mahajan, Chenhao Tan, and Amit Sharma. "Towards Unifying Feature Attribution and Counterfactual Explanations: Different Means to the Same End." *In Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society (AIES '21)*, 2021.
2. Palashi Vaghela, **Ramaravind Kommiya Mothilal**, and Joyojeet Pal. "Birds Of A Caste - How Caste Hierarchies Manifest In Retweet Behavior Of Indian Politicians." *In Conference Companion Publication of the 2021 on Computer Supported Cooperative Work and Social Computing (CSCW 2021)*, 2021.
3. Anmol Panda, **Ramaravind Kommiya Mothilal**, Monojit Choudhury, Kalika Bali, and Joyojeet Pal. "Topical focus of political campaigns and its impact: Findings from politicians' hashtag usage during the 2019 Indian elections." *In Conference Companion Publication of the 2020 on Computer Supported Cooperative Work and Social Computing (CSCW 2020)*, pp.607-617. 2020.
4. Devansh Mehta, **Ramaravind Kommiya Mothilal**, Alok Sharma, William Thies, and Amit Sharma. "Using Mobile Airtime Credits to Incentivize Learning, Sharing and Survey Response: Experiences from the Field." *In Proceedings of the 3rd ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS 2020)*, pp. 254-264. 2020.
5. Devansh Mehta, Sebastin Santy, **Ramaravind Kommiya Mothilal**, Brij Mohan Lal Srivastava, Alok Sharma, Anurag Shukla, Vishnu Prasad, U. Venkanna, Amit Sharma, and Kalika Bali. "Learnings from Technological Interventions in a Low Resource Language: A Case-Study on Gondi." *In Proceedings of The 12th Language Resources and Evaluation Conference (LREC 2020)*, pp. 2832-2838. 2020.
6. **Ramaravind Kommiya Mothilal**, Amit Sharma, and Chenhao Tan. "Explaining machine learning classifiers through diverse counterfactual explanations." *In Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency (FAccT 2020)*, pp. 607-617. 2020.
7. **Ramaravind Kommiya Mothilal**, Amulya Yadav, and Amit Sharma. "Optimizing peer referrals for public awareness using contextual bandits." *In Proceedings of the 2nd ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS 2019)*, pp. 74-85. 2019

8. **Ramaravind Kommiya Mothilal**, Tinne De Laet, Maarten Pinxten, and Tom Broos. "Predicting first-year engineering student success: from traditional statistics to machine learning." *In Proceedings of the 46th SEFI Annual Conference 2018*, vol. 46, pp. 322-329. SEFI-Société Européenne pour la Formation des Ingénieurs, 2018.
9. Juhi Ajmera, P. R. Siddharthan, **Ramaravind Kommiya Mothilal**, Gautham Vasan, Naresh Balaji, and V. Sankaranarayanan. "Autonomous visual tracking and landing of a quadrotor on a moving platform." *In 2015 Third International Conference on Image Information Processing (ICIIP)*, pp. 342-347. IEEE, 2015.

Referred Posters and Extended Abstracts

1. Devansh Mehta, Alok Sharma, **Ramaravind Kommiya Mothilal**, Anurag Shukla, Vishnu Prasad, William Thies, Venkanna U, Colin Scott, and Amit Sharma. "Facilitating Media Distribution with Monetary Incentives." *In Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pp. 1-7. 2020.
2. Faisal Lalani, **Ramaravind Kommiya Mothilal**, and Joyojeet Pal. "The Appeal of Influencers to the Social Media Outreach of Indian Politicians" *In Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing (CSCW 2019)*, pp. 607-617. 2019.
3. **Ramaravind Kommiya Mothilal**, Devansh Mehta, Alok Sharma, William Thies, and Amit Sharma. "Learnings from an ongoing deployment of an IVR-based platform for voter awareness." *In Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing (CSCW 2019)*, pp. 257-261. 2019. ([a non-archival version won Outstanding Poster Award at COMPASS 2019](#))

Referred Journal Publications

1. **Ramaravind Kommiya Mothilal**, T. R. Shravan, and S. N. Omkar. "Scale adaptive object tracker with occlusion handling." *International Journal of Image, Graphics and Signal Processing (IJIGSP)* 8, no. 1 (2016): 27.

Software and Open-Source Contributions

DiCE: Diverse Counterfactual Explanations for Machine Learning, *Microsoft Research India*
<https://github.com/interpretml/DiCE>

Invited Talks

When Machine Learning meets Educational Science

Feb 2018 Faculty of Psychology and Educational Sciences, KU Leuven

Mar 2018 Leuven Engineering and Science Education Center (LESEC)

News Media

Dalit MPs less likely to be heard on Twitter than upper castes

Oct 2020

With Palashi Vaghela and Joyojeet Pal in [The Times of India](#)

Birds of Brahmanical Feather Flock Together

Aug 2020

With Palashi Vaghela and Joyojeet Pal in [The Wire](#)

Elections 2019: What tweet for tat tells you about Rahul Gandhi

Apr 2019

With Joyojeet Pal in [LiveMint](#)

References

Amit Sharma

Senior Researcher, Microsoft Research India

Joyojeet Pal

Principal Researcher, Microsoft Research India

Chenhao Tan

Assistant Professor, University of Colorado Boulder

Tinne De Laet

Associate Professor, KU Leuven