

# Ramaravind Kommiya Mothilal

Web: <https://raam93.github.io>

Mail: [raam.arvind93@gmail.com](mailto:raam.arvind93@gmail.com)

## Research Interests

My research interests lie in fairness in socio-technical systems along the following two axes:

- **Interpretability:** Developing fairness-aware machine learning systems and actionable explainability tools.
- **Social Networks:** Understanding the implications of socio-cultural factors in influencing information flow within networks of people.

## 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

### SCAI Centre Fellow

Jan 2019 – present

Centre for Socetal impact through Cloud and Artificial Intelligence

Microsoft Research India

Mentors: Amit Sharma and Joyojeet Pal

### Research Intern

Jul 2018 – Dec 2018

Technology for Emerging Markets group, Microsoft Research India

Mentor: Amit Sharma

### Research Intern

May 2014 – Jul 2014

Computational Intelligence Lab, Indian Institute of Science (IISc)

Mentor: SN Omkar

## Industry Experience

### Analyst

Jul 2015 – Jul 2016

Data Archival Team

Royal Bank of Scotland (RBS), Chennai, India

## Verified Certification

**Data Analysis for Social Scientists - Grade: 91%**

Feb 2018 - Jun 2018

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

## Publications

### In-Press Publications

1. Palashi Vaghela, **Ramaravind Kommiya Mothilal**, and Joyojeet Pal (*in press*). "Birds Of A Caste - How Caste Hierarchies Manifest In Retweet Behavior Of Indian Politicians." *In Conference Companion Publication of the 2020 on Computer Supported Cooperative Work and Social Computing (CSCW 2020)*, 2020.

### Referred Conference Publications

1. 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.
2. 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.
3. 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.
4. **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.

5. **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
6. **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.
7. 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.

## 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