

Venkata Rama Kiran, Garimella

CONTACT INFORMATION Massachusetts Institute of Technology (MIT) Email: garimell@mit.edu
http://users.ics.aalto.fi/kiran/

EXPERIENCE **Rutgers School of Communication and Information** Sept 2021

Institute for Data, Society and Systems, MIT Mar 2019 - Aug 2021
Michael Hammer Postdoc
Supervisor: Dean Eckles.

École Polytechnique Fédérale de Lausanne, Mar 2018 - Mar 2019
Postdoc
Supervisor: Robert West.

Aalto University, Helsinki, Finland 2014 – 2018
PhD in Computer Science
Supervisor: Aris Gionis.

IIIT Hyderabad, India 2006 – 2011
Master of Science and Bachelor of Technology (Hons) in Computer Science.

PHD THESIS **Polarization on Social Media**

- We proposed methods to algorithmically detect, quantify and overcome polarization on social media. Our methods are graph based, and hence, language and domain agnostic and are able to scale for large datasets with millions of users.

GRANTS

- **Refugee Return in the Internet Era: Social Media Narratives from North Syria**, Co-PI with Fotini Christia, WorldBank and UNHCR, USD 25,000.
- **Encrypted Messaging Research**, Co-PI with Scott Hale, Omidyar Foundation, USD 375,000.
- **Viral misinformation on closed communication platforms**, Co-PI with Dean Eckles, MIT Sloan Junior researcher grant, USD 30,000.
- **Urban Dictionary as a linguistic lexion**, Co-PI with Walid Magdy, Gareth Tyson and Barbara McGillivray, Alan Turing Institute, GBP 70,000.
- **CoronaVirusFacts Alliance grant by the International fact checking network**, data grant (one of six selected out of 114 applicants).
- (Under review) **AIM: An Image-based Misinformation challenge**, Co-PI with Lydia Manikonda, Google, USD 75,000.

ACADEMIC HONOURS

- Recipient of SIGIR travel grant (thrice) for CIKM 2015, WSDM 2016, WSDM 2017, SIGWEB grant (twice) for Hypertext 2014, WebScience 2017, and AAAI grant for ICWSM 2017.
- Best reviewer award at ICWSM 2020.
- Selected for the Heidelberg Laureate Forum Young Researcher fellowship 2020.
- Best student paper award at WebScience 2017.
- Best student paper award at WSDM 2017.
- Best presentation award, Best paper nomination at SocInfo 2014.

INVITED TALKS

- Invited keynote speaker at Integrity in Social Networks and Media workshop at WSDM 2020, Houston, February 2020.

- Invited panel speaker at StratCom DC 2019, organized by the Atlantic Council, Washington DC, October 2019.
- Invited panel speaker at Online News Association conference, New Orleans, September 2019.
- Invited speaker at Annual Sociological Association pre conference on Digital Demography, New York, August 2019.

WORKING
PROJECTS

Surfacing norms to increase vaccine acceptance with Alex Moehring, Avinash Collis, Amin Rahimian, Dean Eckles, and Sinan Aral (pre-print available).

Quantifying Censorship in Iran: A visual summary of Instagram and Telegram with Fotini Christia.

Social Media Narratives on Conflict from Northern Syria with Fotini Christia (pre-print available).

What Actually Circulates on Partisan WhatsApp Threads in India? Insights from an Unusual Dataset. with Simon Chauchard (pre-print available).

Effective Fact-checking using Large Scale Text Matching with Scott Hale (pre-print available).

Quantifying the Chilling Effect of Online Trolling with Sinan Aral.

Is YouTube the ‘Great Radicalizer’?: Auditing the YouTube Recommender System with Robert West.

Estimating Economic Activity in War Zones using Satellite Imagery with Ingmar Weber (pre-print available).

PUBLICATIONS

Note: The PDFs of all the publications can be accessed on my website <https://users.ics.aalto.fi/kiran/publications.html>.

Claim Matching Beyond English to Scale Global Fact-Checking, *ACL 2021*, Ashkan Kazemi, Kiran Garimella, Devin Gaffney, Scott Hale

“Short is the Road that Leads from Fear to Hate”: Fear Speech in Indian WhatsApp Groups, *The Web Conference 2021*, Punyajoy Saha, Binny Mathew, Kiran Garimella, Animesh Mukherjee.

Global survey on COVID-19 beliefs, behaviors, and norms, *MIT Tech Report*, with Alex Moehring, Avinash Collis, Kiran Garimella, Amin Rahimian, Dean Eckles, Sinan Aral.

Political Polarization in Online News Consumption, *ICWSM 2021*, Kiran Garimella, Robert West, Rebecca Weiss, Tim Smith, Jofish Kaye.

Human Estimates of Body Measurements: Accuracy, Biases, and Mental Models, *EPJ Data Science*, Kirill Martynov, Kiran Garimella, Robert West.

Darks and Stripes: Effects of Clothing on Weight Perception, *IEEE Journal on Social Computing*, Kirill Martynov, Kiran Garimella, Robert West.

Can WhatsApp benefit from debunked fact-checked stories to reduce misinformation?, *Misinformation Review*, Julio Reis, Philippe Melo, Kiran Garimella, Fabricio Benevenuto.

Images and misinformation in political groups: evidence from WhatsApp in India, *Misinformation Review*, Kiran Garimella, Dean Eckles.

Characterising User Content on a Multi-Lingual Social Network, *ICWSM 2020*, Pushkal Agarwal, Kiran Garimella, Sagar Joglekar, Nishanth Sastry, Gareth Tyson.

Urban Dictionary Embeddings for Slang NLP Applications, *LREC 2020*, Steve Wilson, Walid Magdy, Barbara McGillivray, Kiran Garimella, Gareth Tyson.

A Dataset of Fact-Checked Images Shared on WhatsApp During the Brazilian and Indian Elections, *ICWSM 2020* (dataset paper), Julio Reis, Philippe Melo, Kiran Garimella, Jussara Almeida, Dean Eckles, Fabricio Benevenuto.

Can WhatsApp Counter Misinformation by Limiting Message Forwarding, *Complex Networks 2019*, Philippe Melo, Carolina Vieira, Kiran Garimella, Pedro de Melo, Fabricio Benevenuto.

Hot Streaks on Social Media, *ICWSM 2019*, Kiran Garimella, Robert West.

WhatsApp Doc?: A First Look at WhatsApp Public Group Data, *ICWSM 2018* (dataset paper), Kiran Garimella, Gareth Tyson.

Studying Migrant Assimilation Through Facebook Interests, *SocInfo 2018*, Antoine Dubois, Emilio Zagheni, Kiran Garimella, Ingmar Weber.

Professional Gender Gaps Across US Cities, *ICWSM 2018*, Karri Haranko, Emilio Zagheni, Kiran Garimella, Ingmar Weber.

Political Discourse on Social Media: Echo Chambers, Gatekeepers, and the Price of Bipartisanship, *WWW 2018*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis.

Joint Non-negative Matrix Factorization for Learning Ideological Leaning on Twitter, *WSDM 2018*, Preethi Lahoti, Kiran Garimella, Aristides Gionis.

Balancing Information Exposure on Social Networks, *NeurIPS 2017*, Kiran Garimella, Aristides Gionis, Nikos Parotsidis, Nikolaj Tatti.

Quantifying Controversy on Social Media, *Transactions on Social Computing 2017*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis.

Understanding Para Social Breakups on Twitter, *ACM WebScience 2017*, Kiran Garimella, Jonathan Cohen, Ingmar Weber.

The Effect of Collective Attention on Controversial Debates on Social Media, *ACM WebScience 2017*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis (**Best Student Paper Award**).

Factors in Recommending Contrarian Content on Social Media, *ACM WebScience 2017*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis.

Ad-blocking: A Study on Performance, Privacy and Counter-measures, *ACM WebScience 2017*, Kiran Garimella, Orestis Kostakis, Michael Mathioudakis.

The Ebb and Flow of Controversial Debates on Social Media, *ICWSM 2017*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis.

A Motif-based Approach for Identifying Controversy, *ICWSM 2017*, Mauro Coletto, Kiran Garimella, Aristides Gionis, Claudio Lucchese.

A Long-Term Analysis of Polarization on Twitter, *ICWSM 2017*, Kiran Garimella, Ingmar Weber.

Media Attention to Science, *WWW 2017 Companion*, Kiran Garimella, Han Xiao.

Understanding International Migration using Tensor Factorization, *WWW 2017 Companion*, Hieu Nguyen, Kiran Garimella.

Balancing Opposing Views to Reduce Controversy, *WSDM 2017*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis (**Best Student Paper Award**).

Quote RTs on Twitter: Usage of the New Feature for Political Discourse, *WebSci 2016*, Kiran Garimella, Ingmar Weber, Munmun De Choudhury.

Discovering the Network Backbone from Traffic Activity Data, *PAKDD 2016, and Journal of Data Science and Analytics 2016*, Kiran Garimella, Sanjay Chawla, Aristides Gionis, Dominic Tsang (Invited for the journal track).

Social Media Image Analysis for Public Health, *CHI 2016*, Kiran Garimella, Aboud Alfayad, Ingmar Weber.

Quantifying Controversy on Social Media, *WSDM 2016*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis (featured in MIT Tech Review, Slate, Business Insider, NBC news, etc).

Scalable Facility Location for Massive Graphs on Pregel-like Systems, *CIKM 2015*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Mauro Sozio.

From “I love you babe” to “leave me alone” - Romantic Relationship Breakups on Twitter, *SocInfo 2014*, Kiran Garimella, Ingmar Weber, Sonya Dal Cin (**Nominated for Best paper award**) (featured in The Washington Post, MIT Tech Review, etc.).

Co-Following on Twitter, *ACM Hypertext 2014*, Kiran Garimella, Ingmar Weber.

Gender Asymmetries in Reality and Fiction: The Bechdel Test of Social Media, *ICWSM 2014*, David Garcia, Ingmar Weber, Kiran Garimella (featured in The Daily Dot, Science Daily, etc).

Who Watches (and Shares) What on YouTube? And When? Using Twitter to Understand YouTube Viewership, *WSDM 2014*, Adiya Abisheva, Kiran Garimella, David Garcia, Ingmar Weber.

Giving is Caring: Understanding Online Donation behavior through Email, *ACM CSCW 2014*. Yelena Mejova, Kiran Garimella, Ingmar Weber, Michael Dougal.

Inferring International and Internal Migration Patterns from Twitter Data, *Webscience workshop at WWW 2014*, Emilio Zagheni, Kiran Garimella, Ingmar Weber, and Bogdan State. (featured in Forbes)

Secular vs. Islamist Polarization in Egypt on Twitter, *ASONAM 2013*, Ingmar Weber, Kiran Garimella, Alaa Batayneh (featured in Foreign Policy, Financial Times, Al Jazeera, etc).

Inferring Audience Partisanship for YouTube Videos, *WWW 2013 Companion*, Ingmar Weber, Kiran Garimella, Erik Borra.

Political Hashtag Hijacking in the U.S, *WWW 2013 Companion*. Asmelash Teka, Kiran Garimella, Ingmar Weber.

Mining Web Query Logs to analyze political issues, *ACM WebScience 2012*. Ingmar Weber, Kiran Garimella, Erik Borra.

Load Prediction and Hot Spot Detection Models for Autonomic Cloud Computing, *UCC 2011*. Prasad Saripalli, Kiran Garimella, Ravi Shankar, Nitin Bindal.

Towards Multi-Document Summarization of Scientific Articles: Making Interesting Comparisons with SciSumm, In, *Workshop on automatic summarization for Different Genres at ACL 2011*, Nitin Agarwal, Kiran Garimella, Ravi Shankar, Carolyn Rose.

Evolutionary Clustering using Frequent Itemsets, *StreamKDD workshop, KDD 2010*. Ravi Shankar, Kiran Garimella, Vikram Pudi.

Frequent Itemset based Hierarchical Document Clustering using Wikipedia as External Knowledge, *KES 2010*. Kiran Garimella, Ravi Shankar, Vikram Pudi.

TUTORIALS

Tools for WhatsApp data collection, ICWSM 2019

Digital and computational approaches to study migration, BIGSSS summer school on migration, 2019.

Polarization on Social Media, ICWSM 2017, WWW 2018, KDD 2018, EuroCSS 2019.

DEMOS

WhatsApp Monitor: A Fact-Checking System for WhatsApp, *ICWSM 2019*, Philippe Melo, Johnnatan Messias, Gustavo Resende, Kiran Garimella, Kiran Garimella, Jussara Almeida, Fabricio Benevenuto (<https://www.monitor-de-whatsapp.dcc.ufmg.br/>)

Exposing Users to Contrarian Viewpoints, *WWW 2017*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis (<https://users>.

ics.aalto.fi/kiran/reducingControversy/homepage).

Exploring Controversy on Twitter, *CSCW 2016*, Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis, Michael Mathioudakis (<http://users.ics.aalto.fi/kiran/controversy>).

Using Co-Following for Out-of-Context Twitter Friend Recommendation, *ICWSM 2014*, Ingmar Weber, Kiran Garimella (<http://scd1.qcri.org/twitter/musicians>).

Visualizing User-Defined, Discriminative Geo-Temporal Twitter Activity, *ICWSM 2014*, Ingmar Weber, Kiran Garimella (<http://nyc.qcri.org>).

FAST: Forecast and Analytics of Social Media and Traffic, *ACM CSCW 2014*, Kiran Garimella, Carlos Castillo (<http://fast.qcri.org>).

#Egypt: Visualizing Islamist vs. Secular tension on Twitter, *ASONAM 2013*, Ingmar Weber, Kiran Garimella (<http://egypt.qcri.org>).

Political Hastag Trends, *ECIR 2013*. Ingmar Weber, Kiran Garimella, Asmelash Teka (<http://politicalhashtagtrends.sandbox.yahoo.com>).

Political Search Trends, *SIGIR 2012*. Ingmar Weber, Kiran Garimella, Erik Borra (<http://politicalsearchtrends.sandbox.yahoo.com>).

SciSumm: A Multi-Document Summarization System for Scientific Articles, *ACL 2011*. Nitin Agarwal, Kiran Garimella, Ravi Shankar, Carolyn Rose.

ACADEMIC
SERVICE

- Editorial board member: Frontiers in Big Data journal.
- Senior PC Member: ICWSM 2020, ICWSM 2021
- Web co-chair Hypertext 2018, Tutorials co-chair ICWSM 2018, Workshops co-chair ICWSM 2020, Sponsorship chair ICWSM 2021.
- PC Member: WSDM 2016-2021, WWW 2017-2021, ICWSM 2017-2019, SDM 2018-2021, CIKM 2017-2019, SIGIR 2018.
- Co-organizer: UN World Data Forum panel on Innovative use of Social Media for Remote Sensing and SDG Monitoring.

WORK
EXPERIENCE

<i>Consultant at World Bank Group</i>	March 2020–Jan 2021
<i>Research Intern at University of British Columbia</i>	Summer 2017
<i>Machine Learning Intern at Amazon</i>	Summer 2016
<i>Data Science Intern at LinkedIn</i>	Summer 2015
<i>Research Associate at Qatar Computing Research Institute</i>	Dec 2012 - Dec 2013
<i>Research Engineer at Yahoo! Research, Barcelona</i>	Aug 2011 - Dec 2012
<i>Research Intern at Carnegie Mellon University</i>	Summer 2010

REFERENCES

- Aristides Gionis (aristides.gionis@aalto.fi)

- Ingmar Weber (iweber@hbku.edu.qa)
- Dean Eckles (kmeans@mit.edu)
- Fotini Christia (cfotini@mit.edu)