

# **epiDAMIK: Epidemiology meets Data Mining and Knowledge discovery**

Workshop held in conjunction with **ACM SIGKDD 2019**

Anchorage, Alaska - USA. August 5, 2019



## **1. Organizers**

- B. Aditya Prakash, *Virginia Tech.*
- Anil Vullikanti, *UVA*
- Shweta Bansal, *Georgetown*
- Adam Sadilek, *Google*



## **2. Call for Papers**

This workshop is a forum to discuss new insights into how data mining can play a bigger role in epidemiology and public health research. While the integration of data science methods into epidemiology has significant potential, it remains under studied. We aim to raise the profile of this emerging research area of data-driven and computational epidemiology, and create a venue for presenting state-of-the-art and in-progress results---in particular, results that would otherwise be difficult to present at a major data mining conference, including lessons learnt in the 'trenches'. The epiDAMIK at KDD in London, 2018 was a great success.

Our target audience consists of data mining and machine learning researchers from both academia and industry who are interested in epidemiological and public-health applications of their work, and researchers from mathematical epidemiology and public health, who are increasingly dealing with more complex models and novel data sources. To reflect the broad scope of work, we encourage submissions that span the spectrum from theoretical analysis to algorithms and implementation, to applications and empirical studies, from both data mining and public health viewpoints.

Topics of interest include, but are not limited to:

- Epidemiologically-relevant data collection
- Advances in modeling, simulation and calibration of disease spread models
- Syndromic surveillance using social media, search and other data sources
- Challenges in model validation against ground truth
- Outbreak detection and inference
- Visualization of epidemiological data
- Planning for public health policy
- Data-driven advances in control and optimization (like immunization)
- Forecasting disease outcomes
- Graph mining and network science approaches to epidemiology
- Crowdsourced methods for detection and forecasting
- Use of novel datasets for prediction and analysis (including EHR records)
- Data mining data for hospital acquired infections like C.Diff, MRSA etc.
- Identifying health behaviors
- Handling missing and noisy data
- Disease forecasting challenge (like the CDC Flu Challenge) experiences

We invite the submission of regular research papers (6-8 pages) as well as work-in-progress, demo or vision papers (2-4 pages). We also welcome shorter version of papers already published elsewhere (say in a public health focused journal). We recommend papers to be formatted according to the standard double-column ACM Proceedings Style. All papers will be peer reviewed and single-blinded. Authors whose papers are accepted to the workshop will have the opportunity to participate in a poster session, and some set may also be chosen for oral presentation. The accepted papers will be published online and will not be considered archival.

For paper submission, please proceed to the submission website: <https://easychair.org/conferences/?conf=epidamik2019>. Please send any enquiries to [epidamik@gmail.com](mailto:epidamik@gmail.com).

## **3. Important Dates**

All deadlines are set at 11:59 PM Pacific Daylight Time. Workshop paper submissions: May 20, 2019. Workshop paper notifications: June 14, 2019. Camera-ready papers due: July 1, 2019. Workshop date: August 5, 2019.