Held in conjunction with KDD'19 (http://www.kdd.org/kdd2019/)
Aug 5, 2019 - Anchorage, Alaska

15TH INTERNATIONAL WORKSHOP ON MINING AND LEARNING WITH GRAPHS

SCHEDULE

INTRODUCTION

There is a great deal of interest in analyzing data that is best represented as a graph. Examples include the WWW, social networks, biological networks, communication networks, transportation networks, energy grids, and many others. These graphs are typically multi-modal, multi-relational and dynamic. In the era of big data, the importance of being able to effectively mine and learn from such data is growing, as more and more structured and semi-structured data is becoming available. The workshop serves as a forum for researchers from a variety of fields working on mining and learning from graphs to share and discuss their latest findings.

There are many challenges involved in effectively mining and learning from this kind of data, including:

- Understanding the different techniques applicable, including graph mining algorithms, network embeddings, graphical models, latent variable models, matrix factorization methods and more.

- Dealing with the heterogeneity of the data.
- The common need for information integration and alignment.
- Handling dynamic and changing data.
- Addressing each of these issues at scale.

Traditionally, a number of subareas have contributed to this space: communities in graph mining, learning from structured data, statistical relational learning, inductive logic programming, and, moving beyond subdisciplines in computer science, social network analysis, and, more broadly network science.

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MLG Workshop Retweeted

Shobeir Fakhraei
@shobeirf

Great to co-organize @mlgworkshop again with @Hofleitner, @danaikoutra, Julian McAuley, @phanein, and @tim_weninger at #kdd2019. CFP and more information to follow soon. cc: #DataMining #MachineLearning #GraphMining #NetworkScience #DataSciencemlgworkshop.org/2019/

Mar 31, 2019

MLG Workshop Retweeted

Shobeir Fakhraei
@shobeirf

Please consider submitting your papers for this special issue.
We hope to cover several topics. Survey and review papers, as well as extensions to previously published work are welcome!
cc: #GraphMining #NetworkScience #MachineLearning #DataScience

Oct 29, 2018

MLG Workshop Retweeted

Shobeir Fakhraei
@shobeirf

Poster session is the last thing on the @mlgworkshop's schedule.
Thank you for the great talks and attendance.
And congrats again to the best papers this year! Don't forget to check them out! @kdd_news #KDD2018 mlgworkshop.org/2018/#papers

SCHEDULE

TBD

All accepted papers will be presented in the poster session.
Based on scheduling constraints, some papers are selected as contributed talks or spotlight presentations.

CALL FOR PAPERS

This workshop is a forum for exchanging ideas and methods for mining and learning with graphs, developing new common understandings of the problems at hand, sharing of data sets where applicable, and leveraging existing knowledge from different disciplines. The goal is to bring together researchers from academia, industry, and government, to create a forum for discussing recent advances graph analysis. In doing so, we aim to better understand the overarching principles and the limitations of our current methods and to inspire research on new algorithms and techniques for mining and learning with graphs.

To reflect the broad scope of work on mining and learning with graphs, we encourage submissions that span the spectrum from theoretical analysis to algorithms and implementation, to applications and empirical studies. As an example, the growth of user-generated content on blogs, microblogs, discussion forums, product reviews, etc., has given

rise to a host of new opportunities for graph mining in the analysis of social media. We encourage submissions on theory, methods, and applications focusing on a broad range of graph-based approaches in various domains.

Topics of interest include, but are not limited to:

- **Theoretical aspects:**
  - Computational or statistical learning theory related to graphs
  - Theoretical analysis of graph algorithms or models
  - Sampling and evaluation issues in graph algorithms
  - Analysis of dynamic graphs
- **Algorithms and methods:**
  - Graph mining
  - Probabilistic and graphical models for structured data
  - Heterogeneous/multi-model graph analysis
  - Network embedding models
  - Statistical models of graph structure
  - Combinatorial graph methods
  - Semi-supervised learning, active learning, transductive inference, and transfer learning in the context of graph
- **Applications and analysis:**
  - Analysis of social media
  - Analysis of biological networks
  - Knowledge graph construction
  - Large-scale analysis and modeling

We welcome many kinds of papers, such as, but not limited to:

- Novel research papers
- Demo papers
- Work-in-progress papers
- Visionary papers (white papers)
- Appraisal papers of existing methods and tools (e.g., lessons learned)
- Relevant work that has been previously published
- Work that will be presented at the main conference

Authors should **clearly indicate** in their abstracts the kinds of submissions that the papers belong to, to help reviewers better understand their contributions.

All papers will be peer reviewed, single-blinded. Submissions must be in PDF, **no more than 8 pages long** — shorter papers are welcome — and formatted according to the standard double-column ACM Proceedings Style (http://www.acm.org/publications/proceedings-template#aL2). The accepted papers will be published on the workshop's website and will not be considered

archival for resubmission purposes.

Authors whose papers are accepted to the workshop will have the opportunity to participate in a spotlight and poster session, and some set will also be chosen for oral presentation.

For paper submission, please proceed to the submission website (https://easychair.org /conferences/?conf=mlg2019).

Please send enquiries to chair@mlgworkshop.org.

To receive updates about the current and future workshops and the Graph Mining community, please join the Mailing List (https://groups.google.com/d/forum/mlg-list), or follow the Twitter Account (https://twitter.com/mlgworkshop).

IMPORTANT DATES

Paper Abstract Deadline: May 5, 2019

Paper Submission Deadline: May 12, 2019

Author Notification: June 1, 2019

Camera Ready: June 22, 2019

Workshop: August 5, 2019

WORKSHOP ORGANIZERS

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PREVIOUS WORKSHOPS

2018, London, United Kingdom (co-located with KDD) (http://www.mlgworkshop.org/2018/)

2017, Halifax, Nova Scotia, Canada (co-located with KDD) (http://www.mlgworkshop.org/2017/)

2016, San Francisco, USA (co-located with KDD) (http://www.mlgworkshop.org/2016/)

2013, Chicago, USA (co-located with KDD) (http://snap.stanford.edu/mlg2013/)

2012, Edinburgh, Scotland (co-located with ICML) (http://dtai.cs.kuleuven.be/events/mlg2012/)

2011, San Diego, USA (co-located with KDD) (http://www.cs.purdue.edu/mlg2011/)

2010, Washington, USA (co-located with KDD) (http://www.cs.umd.edu/mlg2010/)

2009, Leuven, Belgium (co-located with SRL and ILP) (http://dtai.cs.kuleuven.be/ilp-mlg-srl//)

2008, Helsinki, Finland (co-located with ICML) (http://research.ics.aalto.fi/events/MLG08/)

2007, Firenze, Italy (http://mlg07.dsi.unifi.it/)

2006, Berlin, German (co-located with ECML and PKDD) (http://www.inf.uni-konstanz.de
/mlg2006/index.shtml)

2005, Porto, Portugal, October 7, 2005

2004, Pisa, Italy, September 24, 2004 (http://hms.liacs.nl/mgts2004/)

2003, Cavtat-Dubrovnik, Croatia (http://www.ar.sanken.osaka-u.ac.jp/MGTS-2003CFP.html)

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