

# Calls for Papers

# 2016 ACM SIGKDD Innovation and Service Awards

#### Nominations due May 20, 2016 (Friday)

ACM SIGKDD invites your nominations for its 2016 Innovation and Service Awards.

ACM SIGKDD, ACM's Special Interest Group on Knowledge Discovery and Data Mining (KDD), is the premier global professional organization for researchers and professionals dedicated to the advancement of the science and practice of knowledge discovery and data mining. It established the Innovation and Service Awards to recognize outstanding technical and service contributions to the KDD field.

### ACM SIGKDD Innovation Award

Innovation Award recognizes one individual or one group of collaborators whose outstanding technical innovations in the field of Knowledge Discovery and Data Mining have had a lasting impact in advancing the theory and practice of the field. The contributions must have significantly influenced the direction of research and development of the field or transferred to practice in significant and innovative ways and/or enabled the development of commercial systems.

The previous SIGKDD Innovation Award winners were Rakesh Agrawal, Jerome Friedman, Heikki Mannila, Jiawei Han, Leo Breiman, Ramakrishnan Srikant, Usama M. Fayyad, Raghu Ramakrishnan, Padhraic Smyth, Christos Faloutsos, J. Ross Quinlan, Vipin Kumar, Jon Kleinberg, Pedro Domingos, and Hans-Peter Kriegel.

### **ACM SIGKDD Service Award**

Service Award recognizes one individual or one group for their outstanding professional services contributions to the field of knowledge discovery and data mining. Services recognized include significant contributions to the activities of professional KDD societies and conferences, educating students, researchers and practitioners, funding R&D activities, professional volunteer services in disseminating technical information to the field, and contributions to society at large through applications of KDD concepts to improve global medical care, education, disaster/crisis management, environment, etc.

The previous SIGKDD Service Award winners were Gregory Piatetsky-Shapiro, Ramasamy Uthurusamy, Usama M. Fayyad, Xindong Wu, the Weka team led by Ian Witten and Eibe Frank, Won



#### **Nomination Process**

Nominations should include a 1-2 page summary statement justifying the nomination along with other supporting materials. Each nomination should be co-sponsored by at least 3 people. At most one award will be given each year in each category. All communications will be via email. Nominations will be valid for a period of 3 years. At the same time, updates for the valid nominations are encouraged.

Please email all nomination and support documents by May 20, 2016 (Friday) to jpei@cs.sfu.ca with subject line "SIGKDD Award Nomination"

The 2016 awards will be presented at the 22nd ACM KDD Conference in San Francisco, California, USA, August 13-17, 2016, http://www.kdd.org/kdd2016/

SIGKDD Chair and members of the SIGKDD Awards Committee are not eligible to be nominated for either Award and are excluded from participating in the nomination process as nominators or as supporters of the nominations.

#### 2016 ACM SIGKDD Awards Committee

Rakesh Agrawal

Pedro Domingos

Christos Faloutsos

Jiawei Han

Hans-Peter Kriegel

Vipin Kumar

Jian Pei (Chair)

Raghu Ramakrishnan

Padhraic Smyth

Xindong Wu

# 2016 SIGKDD Doctoral Dissertation Award - Call for Nominations

#### Nomination Deadline: April 30, 2016

The annual SIGKDD doctoral dissertation award recognizes excellent research by doctoral candidates in the field of data mining and knowledge discovery. The award winner and up to two runners-up will be recognized at the KDD conference, and their dissertations will have the opportunity to be published on the KDD Web site (http://www.kdd.org). The award winner will receive a plaque, and a check for \$2,500. The award winner will also receive a free registration to attend the KDD conference. The runners-up will receive a plaque at the conference. The award winner and the runners-up will be invited to present his or her work in a special session at the KDD conference.

#### Eligibility:



poncy that each department can only nominate one studenty.

- The doctoral candidate must have successfully defended the nominated dissertation, and the dissertation must have been accepted by the candidate's academic unit before the submission deadline. The dissertation defense must not have taken place prior to January 1st, 2015.
- Submissions must be received by the submission deadline (see below).
- A dissertation can be nominated for both the SIGKDD Doctoral Dissertation Award and the ACM Doctoral Dissertation Award.

#### **Important Dates:**

Submission Deadline: April 30, 2016.

Notification of Awards: July 1, 2016.

Award Presentation at KDD 2016: August 13-17, 2016, San Francisco, CA.

#### Submission:

All nomination materials must be submitted electronically to:

https://cmt3.research.microsoft.com/KDD2016PhD/

All nomination materials must be in English. PDF format is preferred for all materials. Late submissions will not be accepted. A nomination must include:

- 1. A nomination letter, written by the dissertation advisor of the candidate. This letter must include full contact information for both the advisor and the nominee as well as a one- or two-page summary of the significance of the dissertation.
- 2. One copy of the doctoral dissertation.
- 3. Optionally, the nomination may include up to two supporting letters from other individuals, discussing the significance of the dissertation.

For dissertations selected as award recipients, a copyright transfer form signed by the candidate is required giving permission for the dissertation to appear on KDD.org Web (but if the nomination is also being submitted for the ACM Doctoral Dissertation Award, only one form needs to be signed). See:

http://www.acm.org/pubs/copyright\_form.html

Additional information is available at:

http://kdd.org/awards\_dissertation.php

Please direct questions to the Award Committee Chair:

Haixun Wang, Facebook, haixun [at] fb.com

# KDD 2016 Call for Tutorial Proposals

KDD 2016 will host tutorials covering topics in data mining that are of interest to the research community as well as application developers. The tutorials will be part of the main conference technical program, and are free of charge to the attendees of the conference.



and fast growing directions, and significant applications are highly encouraged. We encourage tutorials in areas that are somewhat different from the usual KDD mainstream, but still very much related to KDD mission and objectives of gaining insight from data.

# **Proposals**

Each tutorial should be about 3 hours in length.

A tutorial proposal should be formatted in the following sections.

- Title
- Abstract (up to 150 words)
- Target audience and prerequisites. Proposals must clearly identify the intended audience for the tutorial (e.g., novice users of statistical techniques, or expert researchers in text mining). What background will be required of the audience? Why is this topic important/interesting to the KDD community? What is the benefit to participants?
- Outline of the tutorial. Enough material should be included to provide a sense of both the scope
  of material to be covered and the depth to which it will be covered. The more details that can be
  provided, the better (up to and including links to the actual slides). Note that the tutors should
  NOT focus exclusively on their own research results. A KDD tutorial is not meant to be a forum
  for promoting one's research or product.
- A list of forums and their time and locations if the tutorial or a similar/highly related tutorial has been presented by the same author(s) before, and highlight the similarity/difference between those and the one proposed for KDD'15 (up to 100 words for each entry)
- Tutors' short bio and their expertise related to the tutorial (up to 200 words per tutor)
- A list of the most important references that will be covered in the tutorial
- (Optional) URLs of the slides/notes of the previous tutorials given by the authors, and any specific audio/video/computer requirements for the tutorial.

Proposals should be received by Friday, February 19. Please submit by email to: tutorials 2016@kdd.org with subject heading: "KDD16 Tutorial Proposal Submission"

## **Deadlines and Dates**

• Tutorial proposal submissions: February 19, 2016

Tutorial proposal notifications: March 31, 2016

• Slides due: June 30, 2016

## **Tutorial Co-chairs**

- S V N Vishwanathan (University of California Santa Cruz)
- Hanghang Tong (Arizona State University)

# KDD 2016 Call for Workshop Proposals



participants from academia, mudstry, government and other related parties to present and discuss novel ideas on current and emerging topics relevant to knowledge discovery and data mining.

Workshops are scheduled for August 14, 2016.

# Description

Each workshop should be organized under a well-defined theme focusing on emerging research areas, challenging problems and industrial/governmental applications. Organizers have free controls on the format, style as well as building blocks of the workshop. Possible contents of a workshop include but are not limited to invited talks, regular papers/posters, panels, and other pragmatic alternatives. In case workshop proposers need extra time to prepare their workshop, early decisions may be considered if justified.

The goal of the workshops is to provide an informal forum to discuss important research questions and practical challenges in data mining and related areas. Novel ideas, controversial issues, open problems and comparisons of competing approaches are strongly encouraged as workshop topics. In particular, we would like to encourage organizers to avoid a mini-conference format by (i) encouraging the submission of position papers and extended abstracts, (ii) allowing plenty of time for discussions and debates, and (iii) organizing workshop panels.

## **Topics of Interest**

Possible workshop topics include all areas of *data mining and knowledge discovery, machine learning, statistics*, and *data and information sciences*, but are not limited to these. Interdisciplinary workshops with applications of data mining and data sciences to various disciplines (such as health, medicine, biology, sustainability, ecology, social sciences, humanities, or aerospace) are of high interest.

## **Duties**

Organizers of accepted workshops are expected to announce the workshop and disseminate call for papers, maintain the workshop website, gather submissions, conduct the reviewing process and decide upon the final workshop program. They are also required to prepare an *informal* set of workshop proceedings to be distributed with the registration materials at the main conference, with a proceedings format template provided by KDD 2016. Workshop organizers may choose to form organizing or program committees aiming to accomplish these tasks successfully.

**Note:** Workshop papers will not be archived in the ACM Digital Library. However, workshop organizers may set up any archived publication mechanism that best suits their workshop.

# **Proposals**

The proposal should contain the following information:

- The NAMES, AFFILIATIONS, and SHORT BIOS of all the organizers
- The MAIN CONTACT organizer's e-mail and telephone number
- The TITLE of the workshop
- A maximum of three paragraphs that describe the TOPIC of the workshop, its target AUDIENCE, and its RELEVANCE to SIGKDD
- One paragraph MOTIVATING the workshop (why we should organize it NOW in conjunction with KDD 2016)
- Tentative names of invited speakers, reviewers, and panelists (if a panel will be organized)



- and number of submissions/accepted papers from past editions
- For new workshops, a list of possible attendees/submissions and/or a justification of the expected attendees/submissions
- Tentative descriptions of all other workshop components (panels, discussion sessions, poster sessions, invited talks, etc.)

Workshop proposals should be emailed to workshops 2016@kdd.org by February 19, 2016 at 11:59 PM Pacific Standard Time.

## **Deadlines and Dates**

This year, all workshops will have a uniform deadline for their paper submissions and notifications. In addition, all deadlines are at 11:59 PM Pacific Standard Time.

- Workshop proposal submissions: February 19, 2016
- Workshop proposal notifications: March 14, 2016
- Workshop paper submissions: May 16, 2016
- Workshop paper notifications: June 13, 2016
- Workshop chair notifications (number of papers and acceptance rate): June 15, 2016
- Final submission of workshop program and materials: July 1, 2016
- Workshop date: August 14, 2016

## **Workshop Co-chairs**

- Quoc Le (Google)
- Zhi-Hua Zhou (Nanjing University)

# KDD 2016 Call for Research Track Papers

## Paper submission and deadlines

Submission date: February 12, 2016

Notification date: May 12, 2016

Camera Ready: June 12, 2016

Short Promotional Video (Required): June 17, 2016

Source Code and Presentation (Optional): June 17, 2016

**Note:** This year, (aside from the usual ACM/Sheridan-centric camera ready procedures) we will ask authors to make electronic versions of their manuscripts available at a publicly hosted Website immediately after acceptance, and give them the option of updating it at the camera ready deadline when they submit official versions to ACM/Sheridan printing.

#### Website:



#### **Deadlines:**

The deadline for submission is February 12, 2016, at 11:59PM Pacific Standard Time.

# Description of the Research track

We invite submission of papers describing innovative research on all aspects of knowledge discovery and data mining, ranging from theoretical foundations to novel models and algorithms for data mining problems in science, business, medicine, and engineering. Visionary papers on new and emerging topics are also welcome, as are application-oriented papers that make innovative technical contributions to research. Authors are explicitly discouraged from submitting incremental results that do not provide significant advances over existing approaches.

Papers submitted to the Research Track are solicited in all areas of data mining, knowledge discovery, and large-scale data analytics, including, but not limited to:

- **Big Data:** Distributed data mining and machine learning platforms and algorithms, systems for large-scale data analytics of textual and graph data, large-scale machine learning systems, distributed computing (cloud, map-reduce, MPI), large-scale optimization, and novel statistical techniques for big data.
- Data Science: Methods for analyzing scientific data, business data, social network analysis, recommender systems, mining sequences, time series analysis, online advertising, bioinformatics, systems biology, text/web analysis, mining temporal and spatial data, and multimedia processing.
- Foundations of Data Mining: Data mining methodology, data mining model selection, visualization, asymptotic analysis, information theory, security and privacy, graph and link mining, rule and pattern mining, web mining, dimensionality reduction and manifold learning, combinatorial optimization, relational and structured learning, matrix and tensor methods, classification and regression methods, deep learning, semi-supervised learning, and unsupervised learning and clustering.

## Evaluation and decision criteria

As per KDD tradition, reviews are not double-blind, and author names and affiliations should be listed.

Submitted papers will be assessed based on their novelty, technical quality, potential impact, and clarity. For papers that rely heavily on empirical evaluations, the experimental methods and results should be clear, well executed, and repeatable. Authors are strongly encouraged to make data and code publicly available whenever possible.

Papers will be reviewed by members of the KDD program committee and decisions will be emailed to all authors by May 12, 2016.

# Formatting requirements

Papers are limited to 10 pages, including references, diagrams, and appendices, if any. The format is the standard double column **ACM Proceedings Template**, **Tighter** *Alternate* **style**.Additional information about formatting and style files are available online at:http://www.acm.org/sigs/publications/proceedings-templates.

Note: Papers that do not meet the formatting requirements will be rejected without review.



Submitted papers must describe work that is substantively different from work that has already been published, or accepted for publication, or submitted in parallel to other conferences or to journals. Such submissions violate our dual submission policy.

## Conflicts of interest

Enter the email domains of all institutions with which you have an institutional conflict of interest. You have an institutional conflict of interest if

- You are currently employed or have been employed at this institution in the past three years.
- You have extensively collaborated with this institution within the past three years.
- Furthermore, all authors are required to identify all members of the program committee with which they have a conflict of interest. Select all PC and SPC members who have been your PhD advisor; for whom you have been a PhD advisor; with whom you have co-authored a paper published in or since 2010;
- If there are any other PC or SPC members who you believe have, or may be perceived to have, a conflict of interest not covered above, please notify the PC Chairs by email to the id research-chairs 2016 and the domain name kdd.org (put an @ in the middle).

# Copyright

Accepted papers will be published in the conference proceedings by ACM and also appear in the ACM Digital Library.

# Call for Applied Data Science Track Papers

# Paper submission and deadlines

Submission date: February 12, 2016

Notification date: May 12, 2016

Camera Ready: June 12, 2016

Short Promotional Video (Required): June 17, 2016

Source Code and Presentation (Optional): June 17, 2016

**Note:** This year, (aside from the usual ACM/Sheridan-centric camera ready procedures) we will ask authors to make electronic versions of their manuscripts available at a publicly hosted Website immediately after acceptance, and give them the option of updating it at the camera ready deadline when they submit official versions to ACM/Sheridan printing.

#### Website:

KDD accepts only electronic submissions in PDF format at https://cmt.research.microsoft.com/KDD2016/ (Active for submissions only in January, 2016)

#### **Deadlines:**



## Description of the Applied Data Science track

We invite submissions of papers describing research and implementations of data mining/data analytics/big data/data science solutions and systems for *practical tasks and practical settings*. The application domains of interest include, but are not limited to education, transportation, real-estate, manufacturing, finance, retail, healthcare, e-commerce, telecommunications, law, public policy, government, or non-profit settings. Our primary emphasis is on papers that advance the understanding of, and show how to deal with, practical issues related to deploying analytics technologies. This track also highlights new research challenges motivated by analytics and data mining applications in the real world.

Submitted papers will go through a competitive peer review process. The *Applied Data Science Track* is distinct from the Research Track in that submissions solve real-world problems and focus on systems that are deployed or are in the process of being deployed. Submissions must clearly identify one of the following three areas they fall into: "deployed", "discovery", or "emerging".

The criteria for submissions in each category are as follows:

- **Deployed:** Must describe deployment of a system that solves a non-trivial real-world problem. The focus should be on describing the problem, its significance, decisions and tradeoffs made when making design choices for the solution, deployment challenges, and lessons learned.
- **Discovery:** Must include results that are discoveries with demonstrable value to an industry or government organization. This discovered knowledge must be "externally validated" as interesting and useful; it cannot simply be a model that has better performance on some traditional evaluation metrics such as accuracy or area under the curve. A new business insight enabled by the use of data mining techniques (e.g., user interests match those of their friends on social networks) is an example of what this category will include.
- Emerging: Submissions do not have to be deployed but must have clear applications to distinguish them from KDD research papers. They may also provide insight into issues and factors that affect the successful use and deployment of Data Mining and Analytics. Papers that describe enabling infrastructure for large-scale deployment of Data Mining and analytics techniques also fall in this category.

**Note:** KDD is a dual track conference hosting both a Research track and an Applied Data Science track. Due to the large number of submissions, papers submitted to the Research track will not be considered for publication in the Applied Data Science track and vice-versa. Authors are encouraged to carefully read the track descriptions and choose an appropriate track for their submissions.

## Evaluation and decision criteria

As per KDD tradition, reviews are not double-blind, and author names and affiliations should be listed.

Submitted papers will be assessed based on their novelty, technical quality, potential impact, and clarity. For papers that rely heavily on empirical evaluations, the experimental methods and results should be clear, well executed, and repeatable. Authors are strongly encouraged to make data and code publicly available whenever possible.

Papers will be reviewed by members of the KDD program committee and decisions will be emailed to all authors by May 12, 2016. Note that there will be an author response phase between submission and decisions.



Papers are limited to 10 pages, including references, diagrams, and appendices, it any. The format is the standard double column ACM Proceedings Template, Tighter Alternate style.

Additional information about formatting and style files are available online at:http://www.acm.org/publications/article-templates/proceedings-template.html.

Note: Papers that do not meet the formatting requirements will be rejected without review.

# **Dual submission policy**

Submitted papers must describe work that is substantively different from work that has already been published, or accepted for publication, or submitted in parallel to other conferences or to journals. Such submissions violate our dual submission policy.

There are several exceptions to this rule:

- Submission is permitted of a short version of a paper that has been submitted to a journal, but
  has not yet been published in that journal. Authors must declare such dual-submissions either
  through the CMT submission form, or via email to the program chairs (industrychairs2016@kdd.org). It is the authors' responsibility to make sure that the journal in question
  allows dual concurrent submissions to conferences.
- Submission is permitted for papers presented or to be presented at conferences or workshops without proceedings, or with only abstracts published.
- Submission is permitted for papers that have previously been made available as a technical report (or similar, e.g., in arXiv).

# Copyright

The rights retained by authors who transfer copyright to ACM can be found here.

