

# KDD 2020 Call for Applied Data Science Papers

## Key Dates

- Submission: February 13, 2020
- Notification: May 15, 2020
- Camera-ready: June 5, 2020
- Short Promotional Video of Accepted Papers (Required): June 23, 2020
- Source Code (Optional): June 23, 2020
- Conference (San Diego, California): August 22 to August 27, 2020

All deadlines are at 11:59PM [Alofi Time](#). There will be absolutely no exception to these deadlines.

## Description

We solicit submissions of papers describing designs and implementations of solutions and systems for practical tasks in data mining, data analytics, data science, and applied machine learning. The primary emphasis is on papers that **either solve or advance the understanding of** issues related to deploying data science technologies in the real world. Papers demonstrating **significant, verifiable** business- or real-world impact as a result of such deployments are also encouraged. Further, paper investigating or addressing the applications aligned with this year's theme on *Responsible Data Science* (see below) are particularly encouraged.

Submitted papers will go through a peer review process.

The Applied Data Science Track is distinct from the Research Track in that submissions focus on applied work addressing real-world problems and systems demonstrating tangible impact/value in their respective domains (e.g., industries, government initiatives, social programs).

Submissions must clearly identify the category they fall into: “deployed” or “evidential. The ADS Chairs may shift a submission from one category to another, if they find that the submission is misplaced. The criteria for submissions in each category are as follows:

**CATEGORY Deployed:** Must describe implementation of a system that solves a significant real-world problem and is (or was) in production use for an extended period of time. The paper should present the problem, its significance to the application domain, point to relevant prior art in solving the specific business problem in that domain, the decisions and tradeoffs made when making design choices for the solution, the deployment challenges, the performance metrics (and how they map to business or application objective), and the lessons learned from successes and failures . Evidence must be provided that the solution has been deployed by quantifying post-launch performance and outline how the online deployment differed from the offline setup. Papers that describe enabling infrastructure for large-scale deployment of applied machine learning also fall in this category.

**CATEGORY Evidential:** Must describe fundamental insights derived from addressing a significant real-world problem, even though a system has not been deployed. This might include papers providing significant gains in the understanding of an applied area/domain (for example, involving data or system deployment needs) or even papers where a conclusion has been reached that the problem is unsolvable. In addition to insights the paper must explain what milestones were reached, what the practical impact is, and (if applicable) what the obstacles to deployment are. Straightforward improvements over trivial baseline solutions are unlikely to qualify.

Please consult the guidelines for authors [here](#).

Submission topics broadly include data-science application in all mature and emerging domains, as well as contributions to enabling algorithmic, infrastructure and optimization methodologies to improve learning efficiency, scaling and adoption/deployment. The ADS track especially encourages submissions aligned with this year's theme on *Responsible Data Science* including contributions with emphasis in the following areas and related aspects:

- Data protection
- Design of experiments
- Interpretable models
- Addressing bias in deployed systems
- Addressing vulnerabilities in on-field deployment
- Improving reliability of deployed systems
- Privacy-sensitive applications of learning systems
- Ethical consideration in applications
- Applications involving explainable aspects of algorithms
- Validation and verification approaches for learning systems
- Applications that support broader goals on sustainability, equitability, bias-reduction, social justice, and social good

## Submission directions

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 read the track descriptions carefully and to choose an appropriate track for their submissions. Following KDD conference tradition, reviews are not double-blind, and author names and affiliations should be listed.

**Submissions are limited to a total of 9 (nine) pages, including all content and references,** and must be in PDF format and formatted according to the new [Standard ACM Conference Proceedings Template](#). For LaTeX users: unzip acmart.zip, make, and use sample-sigconf.tex as a template; Additional information about formatting and style files is available online at: <https://www.acm.org/publications/proceedings-template>. Papers that do not meet the formatting requirements will be rejected without review.

In addition, authors can provide an optional two (2) page supplement at the end of their submitted paper (it needs to be in the same PDF file and start at page 10) focused on reproducibility (see reproducibility section for more details)\*.

Website for submissions: <https://easychair.org/conferences/?conf=kdd2019>

## Important policies

### Reproducibility

Submitted papers will be assessed based on their novelty, technical quality, potential impact, insightfulness, depth, clarity, and reproducibility. Authors are strongly encouraged to make their code and data publicly available whenever possible. Algorithms and resources used in a paper should be described as completely as possible to allow reproducibility. This includes experimental methodology, empirical evaluations, and results. The reproducibility factor will play an important role in the assessment of each submission. Papers that only use sophisticated in-house ML platforms are strongly encouraged to report results on a public dataset with similar settings. The authors are encouraged to take advantage of the optional two-page supplement to provide the appropriate information.

**This supplement can only be used to include** (i) information necessary for reproducing the experimental results, insights, or conclusions reported in the paper (e.g., various algorithmic and model parameters and configurations, hyper-parameter search spaces, details related to dataset filtering and train/test splits, software versions, detailed hardware configuration, etc.), and (ii) any implementation, pseudo-code, or proofs that due to space limitations, could not be included in the main nine-page manuscript, but that help in reproducibility.

### Authorship

Every person named as the author of a paper must have contributed substantially both to the work described in the paper and to the writing of the paper. Every listed author must take responsibility for the entire content of a paper. Persons who do not meet these requirements may be acknowledged, but should not be listed as authors. **Post-submission changes to the author list are not allowed.**

### Dual submissions

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 journals. However, there are several exceptions to this rule.

1. Submission is permitted for a shorter version of a paper submitted to a journal, but not yet published. Authors must declare such dual-submissions on the submission form and must ensure that the journal in question allows concurrent submissions to conferences.

2. Submissions are permitted for papers presented or to be presented at seminars, conferences or workshops without proceedings.
3. Submissions are permitted for papers that have previously been made available only in the form of technical report with no peer reviews, in particular on arXiv.

Violations on the dual submission policy may lead to immediate desk rejection and further penalties including prohibition of submitting to conferences and journals sponsored by SIGKDD and/or ACM for a certain period. The employers of the violating authors may be notified.

### **Conflicts of interest**

During the submission process, 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, or you have extensively collaborated with this institution within the past three years. Authors are also required to identify all PC/SPC members with whom they have a conflict of interest, eg, advisor, student, colleague, or coauthor in the last five years.

Additional information about ACM's Conflict of Interest policy, which KDD follows, can be found at <https://www.acm.org/publications/policies/conflict-of-interest>.

### **Retraction Policy**

KDD follows ACM's policies, which are described at <https://www.acm.org/publications/policies/retraction-policy>.

### **Attendance**

For each accepted paper, at least one author must attend the conference and present the paper. Authors of all accepted papers must prepare a final version for publication, a poster, and a three-minute short video presentation.

### **Copyright**

Accepted papers will be published in the conference proceedings by ACM and also appear in the ACM Digital Library. The rights retained by authors who transfer copyright to ACM can be found [here](#).

AUTHORS TAKE NOTE: The official publication date is the date the proceedings are made available in the ACM Digital Library. This date for KDD 2020 is on or after July 1st, 2020. The official publication date affects the deadline for any patent filings related to published work.

For any questions, please contact [applied2020@kdd.org](mailto:applied2020@kdd.org)