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TBench (BenchCouncil Transactions on Benchmarks, Standards and Evaluations) Calls for Papers

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ABSTRACT

BenchCouncil Transactions on Benchmarks, Standards and Evaluations (TBench) is an open-access journal dedicated to advancing the field of benchmarks, data sets, standards, evaluations and optimizations. This journal is a peer-reviewed, subsidized open-access journal where The International Open Benchmark Council (BenchCouncil) pays the open-access fee. Authors do not have to pay any open-access publication fee. However, at least one of the authors must register BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing (Bench) (https://www.benchcouncil.org/bench/) and present their work. It seeks a fast-track publication with an average turnaround time of one month.

We invite submissions covering a wide range of topics from various disciplines, with a particular emphasis on interdisciplinary research. Whether it pertains to computers, AI, medicine, education, finance, business, psychology, or other social disciplines, all relevant contributions are welcome.

At TBench, we prioritize the reproducibility of research. We strongly encourage authors to ensure that their articles are prepared for open-source or artifact evaluation before submission. The journal website is https://www.benchcouncil.org/tbench.

1. Introduction

BenchCouncil Transactions on Benchmarks, Standards and Evaluations (TBench) is an open-access journal dedicated to advancing the field of benchmarks, data sets, standards, evaluations and optimizations. This journal is a peer-reviewed, subsidized open-access journal where The International Open Benchmark Council (BenchCouncil) pays the open-access fee. Authors do not have to pay any open-access publication fee. However, at least one of the authors must register BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing (Bench) (https://www.benchcouncil.org/bench/) and present their work. It seeks a fast-track publication with an average turnaround time of one month.

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Submission site: https://www.editorialmanager.com/tbench/

LaTex Template: https://www.benchcouncil.org/tbench/TBenchTemplates.zip

2. Call for papers

Areas of interest include, but are not limited to:

1. **Problem definition as a benchmark:**
   * Position articles on the definitions of emerging or future problems/challenges
   * Position articles on opening new research areas
   * Position articles on investigating the impact of new technologies on different disciplines
   * Research articles on instantiating new problem settings
2. **Evaluation standard as a benchmark:**
   * Definition, design, implementation, and validation of evaluation standards
   * Evaluation methodology and metrics
   * New abstractions and tools in evaluation
   * Simulation, emulation, and testbed methodologies and systems in evaluation
3. **Industry best practice as a benchmark:**
   * Searching and summarizing industry best practice
   * Evaluation and optimization of industry practice
   * Retrospective of industry practice
   * Characterizing and optimizing real-world applications and systems
   * Benchmarking

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4. **State-of-the-art solution as a benchmark:**

   * State-of-the-art solutions to well-known benchmarks
   * Benchmarking state-of-the-art solutions
   * Preliminary but insightful solutions to new or emerging problems or benchmarks
   * Evaluations of state-of-the-art solutions in the real-world setting

5. **Data set as a benchmark:**

   * Explicit or implicit problem definition deduced from the data set
   * Detailed descriptions of research or industry datasets, including the methods used to collect the data and technical analyses supporting the quality of the measurements
   * Analyses or meta-analyses of existing data
   * Systems, technologies, and techniques that advance data sharing and reuse to support reproducible research
   * Tools that generate large-scale data while preserving their original characteristics
   * Evaluating the rigor and quality of the experiments used to generate the data and the completeness of the data description

6. **Workload characterization, evaluation, and retrospective of design/implementation of real-world:**

   * Computer or AI applications or systems
   * Finance applications or systems
   * Education applications or systems
   * Business applications or systems
   * Medicine applications or systems
   * Other industry applications or systems

7. **Measurement and evaluation:**

   * Instrumentation, sampling, tracing, and profiling of large-scale, real-world applications and systems
   * Collection and analysis of measurement data that yield new insights
   * Measurement-based modeling (e.g., workloads, scaling behavior, and assessment of performance bottlenecks)
   * Methods and tools to monitor and visualize measurement and evaluation data
   * Systems and algorithms that build on measurement-based findings
   * Advances in data collection, analysis, and storage, e.g., anonymization, querying, and sharing
   * Reappraisal of previous empirical measurements and measurement-based conclusions
   * Descriptions of challenges and future directions that the measurement and evaluation community should pursue

8. **Methodologies, metrics, abstractions, algorithms, and tools for:**

   * Analytical modeling techniques and model validation
   * Workload characterization and benchmarking
   * Performance, scalability, power, and reliability analysis
   * Sustainability analysis and power management
   * System measurement, performance monitoring, and forecasting
   * Anomaly detection, problem diagnosis, and troubleshooting
   * Capacity planning, resource allocation, run-time management, and scheduling
   * Experimental design, statistical analysis, and simulation

3. Guide for authors

3.1. Types of paper

Contributions falling into the following categories will be considered for publication: Position papers, Full-length articles/Research articles, Review articles, Short communications, Discussions, Editorials, Case reports, Practice guidelines, Product reviews, Conference reports, and Opinion papers. Please ensure that you select the appropriate article type from the list of options when making your submission. Authors contributing to special issues should ensure that they choose the special issue article type from this list.

* Position Papers – No page limits
* Full-Length Articles/Research Articles - 12 double-column pages (All research article page limits do not include references and author biographies)
* Review Papers - no page limits
* Short Communications - 4 double-column pages (All short communication article page limits do not include references and author biographies)
* Discussions - 2 double-column pages (All discussion article page limits do not include references and author biographies)
* Editorials - 10 double-column pages (All editorial page limits do not include references and author biographies)
* Case Studies - 8 double-column pages (All case report page limits do not include references and author biographies)
* Practice Guidelines - 12 double-column pages (All practice guideline page limits do not include references and author biographies)
* Product Reviews - 4 double-column pages (All product review page limits do not include references and author biographies)
* Conference Reports - 10 double-column pages (All conference report page limits do not include references and author biographies)
* Opinion Papers - 4 double-column pages (All opinion page limits do not include references and author biographies)

3.2. Peer review

This journal operates a double anonymized review process. All contributions are typically sent to at least two independent expert reviewers to assess the paper's scientific quality. The Editor is responsible for the final decision regarding the acceptance or rejection of articles. The Editor's decision is final. Editors are not involved in decisions about papers that they have written themselves or have been written by family members or colleagues or which relate to products or services in which the Editor has a conflict of interest. Any such submission is subject to the journal's usual procedures, with peer review handled independently of the relevant Editor and their research groups.

If you have any issues or concerns, please get in touch with EIC via jianfengzhan.benchcouncil@gmail.com.

3.3. About BenchCouncil

The International Open Benchmark Council (BenchCouncil) is a non-profit international organization that aims to benchmark, standardize, evaluate, and incubate emerging technologies. Since its founding, BenchCouncil bears four fundamental responsibilities: establish unified benchmark science and engineering across multi-disciplines; define the problems or challenges of emerging and future computing; keep the benchmarks and standards community open, inclusive, and growing; and promote benchmark-based quantitative approaches to tackle multidisciplinary and interdisciplinary challenges. BenchCouncil also hosts a series of influential benchmark projects. BenchCouncil presents the achievement and rising star awards each year at its flagship Bench conference. The BenchCouncil website is https://www.benchcouncil.org/.

4. Editorial board

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