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An open science platform for benchmarking engineering design researches

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Benchmark research in engineering design

Define research

- Type
 - Qualitative
 - Quantitative
 - Multi-disciplinary
- Goals
 - Understand design
 - Improve design
- Expected results

Share data

- Objects
 - Results
 - Type
 - Qualitative
 - Quantitative
 - Group by similarity
 - Datasets
 - Practices
 - Design papers with an exemplary validation
 - Validation practices within a community
 - Bibliographies
- Constraints
 - Dynamic
 - Available

Compare results

- Common hypothesis
- Common measures of performances
- Common datasets
- Common application case
- Common testing protocol
- Exhaustive testing

Provide evidence

- Type of contribution
 - Theoretical (To knowledge)
 - Empirical (To industry)
- Type of evidence
 - Measured performances
 - Meta-analysis
 - Causal influences
 - Added-value to operations in industry
- Repeatable
- Limits of contribution
 - New research questions
 - New benchmarks
- Under constraints
 - Time
 - Budget

Engage

- Cartography
 - Who
 - What
 - Under which circumstances
- Collaboration
 - Space
 - Heterogeneous profiles
 - Community
 - Common terminology
- Articulate
 - Candidate solutions to a design problem
 - Differences among candidate solutions to a design problem
- Select
 - To improve
 - To use in industry
- Compete