

100 words summary -- Guidance

Xiaohong (Sharon) Gao

What is an Output?

- An **output** is the result of your investigation – it could be
 - ✓ a conference paper,
 - ✓ a public lecture,
 - ✓ a conference workshop,
 - ✓ the organisation of a conference,
 - ✓ a journal article,
 - ✓ an **exhibition** or a book which you have either written or edited.
- Outputs can be solely your **own work** or they can be co-produced/authored.

100-word for an output – REF Specification

- “[The panel considers] that the nature of [the discipline] is such that the **significance of an output may not** be evident within the output itself.
- They therefore invite factual information to be provided (**maximum 100 words**) that could include, for example, **additional evidence** about how an output **has gained recognition, led to further developments, or has been applied**.
- They would welcome the inclusion of relevant and verifiable information **for all outputs**, wherever available.
- HEIs are instructed to ensure that such **evidence** is **succinct, verifiable, and externally referenced** where appropriate.
- Where claims are made relating to the **industrial significance** of the output, the **name and contact details of a senior industrialist** must be given to allow verification of claims.
- Information provided **should not comprise** a synopsis of the output or **a volunteered opinion** as to the quality of the output, and information provided that is of this nature will be disregarded.
- It is expected that, in most cases, sufficient information will be provided in **significantly fewer words than the 100 word limit**”.

100-word commentaries should (in following order) (1/2):

1. Provide an annotation of the form **<code>**, where *code* is taken from the ACM Computing Classification System, e.g. **<23>** for **computer vision**.
2. Outline the context for the work *in a single sentence*.
3. From the **second** sentence, make the case that the paper is **significant**.
4. The proposal is that the **second** sentence should start with “**This is significant because**”, or something similar, so that the focus on the **significance** of the case is established early on.

Examples of ACM codes (00-33) (33—no-classified)

ACM 2012 Topics	REF Classification
Hardware	
Printed circuit boards	01
Electromagnetic interference and compatibility	01
PCB design and layout	01
Communication hardware, interfaces and storage	01
Signal processing systems	01
Digital signal processing	01
Beamforming	01
Noise reduction	01
Sensors and actuators	01
Buses and high-speed links	01
Displays and imagers	01
External storage	01
Networking hardware	01

Information systems	
Data management systems	15
Database design and models	15
Relational database model	15
Entity relationship models	15
Graph-based database models	15
Hierarchical data models	15
Network data models	15
Physical data models	15

ACM 2012 Topics	REF Classification
Hardware	01
Computer systems organization	02
Real-time systems	
Networks	04
Network algorithms	05
Network properties	06
Software and its engineering	07
Software notations and tools	08
Software creation and management	09
Theory of computation	10
Logic	11
Design and analysis of algorithms	12
Semantics and reasoning	10
Mathematics of computing	13
Information systems	15
World Wide Web	16
Information retrieval	17
Security and privacy	18
Formal methods and theory of security	10
Security services	19
Human and societal aspects of security and privacy	20

Human-centered computing	20
Human computer interaction (HCI)	20
Collaborative and social computing	21
Visualization	20
Computing methodologies	
Symbolic and algebraic manipulation	12
Parallel programming languages	08
Artificial intelligence	22
Computer vision	23
Machine learning	24
Modeling and simulation	25
Computer graphics	26
Applied computing	
Electronic commerce	27
Life and medical sciences	28
Law, social and behavioral sciences	29
Operations research	30
Education	29
Document management and text processing	17
Social and professional topics	
Management of computing and information systems	31
History of computing	32
Any other topics	
Any topic which does not fit into the above categories	33

100-word commentaries should (2/2):

1. **Significance** is based on (e.g.):

- ✓ the **problem** solved is an **important one**, so any solution to that problem is significant;
- ✓ the **approach** taken to the solution of the problem is **particularly appropriate**, and that properties of that solution make the **output significant**;
- ✓ the **output** describes an approach that has been built on or applied in some way that demonstrates its **significance**;
- ✓ where this applies, **please provide concrete evidence of impact** (inside or outside academia) where this is not inherent in the paper, e.g. if the result has been built on, applied or widely adopted.

Example of 100-word summary (paper-1/3)

- Missier, P., Paton, N.W., Belhajjame, K. "**Fine-grained and efficient lineage querying of collection-based workflow provenance.**" 299-310. Proc. 13th International Conference on Extending Database Technology (EDBT), ACM, 2010.

-Summary

<15> **Workflow provenance** captures information about an execution of a workflow, and queries over provenance data **are widely used to clarify** how the results of a workflow were obtained. **This paper is significant because** previous work on querying workflow provenance traversed the provenance data, whereas this approach only traverses the (**much smaller**) workflow definition, **making relatively few and simple queries** into the provenance data itself; an empirical evaluation **reveals significant** performance benefits. Included **in public releases** of the widely used Taverna workflow system.

Example of 100-word summary (paper-2/3)

- Paton, Norman W, Jorge Buenabad Chávez, Mengsong Chen, Vijayshankar Raman, Garret Swart, Inderpal Narang, Daniel M Yellin, and Alvaro A A Fernandes.
"Autonomic query parallelization using non-dedicated computers: an evaluation of adaptivity options." VLDB J.18, no. 1 (2009) 119-140. doi:10.1007/s00778-007-0090-x..

-Summary

<15> The paper experimentally compares published load balancing techniques for parallel database query processing, identifies weaknesses in those techniques, and proposes a new method that addresses these weaknesses. This is significant because previously adaptive query load balancing techniques had only been compared with non-adaptive techniques and not with each other, and because the systematic evaluation in the paper provided new insights, for example by finding cases where adaptations reduced performance.

Example of 100-word summary (paper-3/3)

- Belhajjame, K., Embury, S.M., Paton, N.W., Stevens, R. and Goble, C.A., "**Automatic annotation of Web services based on workflow definitions.**" ACM Transactions on the Web 2, no. 2 (2008)

-Summary

<16> **Techniques** that support or automate the annotation of web services **are important because** such annotations are useful for service discovery and composition, **but are tricky and time consuming** to author manually. **This paper is significant** in supporting automatic derivation of dependable annotations, **showing for the first time** how workflow provenance can be used to propagate annotations between services. The **empirical evaluation shows** how the approach **identified** previously unidentified errors with manual annotations of e-Science services.

