

Autonomous Scholarship

Professional Development Workshop at ICIS 2026

Lisbon, Portugal | December 13–16, 2026 | sites.nd.edu/autonomous-workshop

We invite researchers to undertake a deliberately extreme experiment in autonomous scholarship by using generative AI to develop innovative contributions on Information Systems topics. Across research production, review and selection, and presentation, the guiding principle is human-orchestrated, AI-performed: humans set objectives, configure and oversee the process, ensure ethical and procedural compliance, and remain accountable, while AI systems perform as much of the substantive work as responsibly and practically possible. Authors should therefore push their workflows as far toward end-to-end AI execution as responsibly feasible, allowing the PDW to examine what current AI systems can and cannot do. Each submission must include a required workflow appendix that makes the human-AI research process transparent and inspectable. Both the research paper and the workflow appendix will undergo AI-led integrity screening, review, meta-review, and selection. Review and selection will consider scholarly quality, validity, transparency, and the extent to which the submission moves beyond conventional AI assistance toward responsible end-to-end AI execution.

Purpose of the Professional Development Workshop

Generative AI is entering every stage of scholarship: the formulation of research questions, the analysis of literature, theory development, research design, data analysis, writing, and peer review. This PDW moves beyond isolated uses of AI and encourages a transparent AI-led process to produce and evaluate AI-led research projects.

The objective is not to advocate the replacement of researchers, reviewers, or editors. The fully automated process is a diagnostic device, which allows the IS community to examine what current AI systems can accomplish, where they fail, whether automated reviewers recognize quality and novelty, and how automated selection compares with subsequent judgments by human experts.

What we invite

We seek original research papers addressing important and innovative questions in Information Systems. Authors should not merely ask GenAI to summarize an established literature or polish a largely human-written manuscript. They should use GenAI throughout the entire workflow—from exploring a new topic and designing a study to developing the principal results and producing the paper.

Submissions should:

- Address a central Information Systems phenomenon or research problem.
- Pursue an innovative question or approach with the potential to advance IS knowledge.
- Push the workflow as far toward end-to-end AI execution as is responsibly possible, using GenAI as the primary executor rather than merely an assistant in problem formulation, theory or conceptual development, research design, analysis, interpretation, and writing.
- Develop the principal findings or propositions largely through AI-executed research workflows.
- Treat the required workflow appendix as a central research artifact and document the human–AI division of labor and the full research workflow transparently.

The workflow appendix: a central research artifact

The required workflow appendix is not supplementary paperwork. It is a central output of the experiment and will be considered in review and selection. It should allow reviewers and PDW participants to reconstruct how the research question, contribution, evidence, and manuscript emerged from the interaction among human authors, AI systems, data, and tools.

At a minimum, the appendix should document:

- a chronological workflow map or narrative covering the major stages of the project;
- the AI models, agent systems, tools, versions, settings, and computational environments used at each stage;
- representative initial prompts, consequential follow-up instructions, and selected outputs that materially shaped the research;
- unsuccessful or abandoned approaches, important errors or weaknesses, how they were detected, and how the workflow responded;

- material human interventions, including choices, feedback, redirections, manual changes, and the reasons for them;
- verification and validation steps, such as citation checks, code and data validation, replication, robustness analysis, cross-model checks, or human review;
- external data sources and links to code, data, prompts, logs, and other research artifacts where these can be shared; and
- a concise human-AI contribution account covering problem formulation, literature identification, theory development, research design, analysis, interpretation, writing, verification, and revision.

The appendix should be selective and readable rather than an unfiltered transcript. Complete logs, code, data, and larger artifacts may be provided through stable repository links. Sensitive data, credentials, and personal information must not be included.

All forms of IS research are welcome

The substantive research topic need not concern artificial intelligence. GenAI is the principal means through which the research is developed; it need not be the phenomenon being studied.

The experiment is deliberately methodologically inclusive. We welcome all established and emerging forms of Information Systems scholarship, including:

- Analytical and mathematical modelling research
- Theoretical and conceptual papers
- Quantitative empirical studies
- Qualitative research, including case studies and interpretive work
- Mixed-methods research
- Laboratory, field, survey, and computational experiments
- Econometric, machine-learning, and simulation-based studies
- Design-science and artifact-oriented research
- Systematic evidence syntheses that produce a genuinely new conceptual contribution

Evaluation criteria will be adapted to the paper's research tradition. Every paper must nevertheless make its claims, evidence, assumptions, and limitations transparent.

The role of human authors and AI systems

The human participants remain the responsible authors and act as research orchestrators. They may identify a broad domain, select models and tools, provide prompts, supply legally and ethically usable data, offer iterative feedback, request checks, and redirect unsuccessful approaches.

GenAI should perform most of the substantive work involved in:

- refining the specific research question and intended contribution;
- identifying and synthesizing relevant literature;
- developing theories, arguments, models, hypotheses, or research designs;
- conducting analyses, simulations, coding, qualitative interpretation, or artifact development;
- deriving and interpreting the principal results;
- writing and revising the manuscript; and
- producing figures, tables, and other research artifacts.

Human authors are expected to scrutinize the outputs. When they identify an error or weakness, they should normally prompt the AI system to investigate and correct it rather than silently replacing the result with undisclosed human work. All material human interventions must be recorded.

Submission package

Research paper

The paper should state its research question, position the contribution in the relevant IS literature, explain the theoretical and methodological approach, present the principal results, and discuss implications and limitations. The main paper may not exceed **eight pages**, excluding references and the required workflow appendix, and must use the [ICIS submission template](#).

Required workflow appendix

Each submission must include the workflow appendix described above. The appendix is excluded from the eight-page limit and will be assessed as a substantive part of the submission rather than as supplementary documentation.

The appendix should contain enough evidence to make the division of intellectual labor and the evolution of the research inspectable, not merely assert that AI was used. Its purpose is to document human and AI contributions, not to assign legal authorship to an AI system.

Automated integrity screening

Submissions will undergo standardized screening for citation hallucinations, prompt injection, text overlap, internal inconsistencies, confidentiality risks, inappropriate content, and obvious methodological or ethical problems. These checks establish eligibility and produce flags for the review agents; they do not constitute a human assessment of scholarly quality.

Submissions containing concealed instructions directed at reviewers, knowingly fabricated sources, misrepresented data, serious ethical violations, or materially false disclosure statements will be excluded from the experiment.

Automated review and selection

The review and selection process will mirror the authoring model: it will be human-orchestrated but AI-performed. The organizers will establish the governance rules and review rubric, configure the review agents and meta-review process, and provide procedural and technical oversight. They will not make scholarly quality judgments or alter the automated ranking and selection before the AI decisions have been finalized. Multiple AI review agents will independently assess each eligible submission using a common and transparent rubric. Different models may be used to examine agreement and disagreement across AI systems.

The automated reviewers will assess:

- importance and relevance of the research question;
- fit with Information Systems;
- novelty and significance of the contribution;
- quality of engagement with the relevant literature;
- theoretical or conceptual coherence;
- appropriateness of the method for the claimed research tradition;
- validity and credibility of the results;
- consistency between evidence and conclusions;
- transparency, reproducibility, and recognition of limitations;
- quality, informativeness, and credibility of the workflow appendix and human-AI contribution disclosure;
- ambition and extent of responsible AI-led execution across the research workflow, including how far the submission moves beyond conventional AI assistance toward end-to-end AI execution and what the workflow reveals about the capabilities and limitations of autonomous scholarship; and
- overall scholarly quality.

An AI meta-review and selection procedure will synthesize the independent reports, consider integrity flags, and select up to four papers for the PDW according to the predefined review rubric. Any human intervention required to address a technical failure, eligibility issue, or safety concern will follow pre-specified procedures and will be documented. Such intervention will not substitute the organizers' scholarly quality judgments for those of the automated review and selection process.

Timeline

DATE	STAGE	WHAT HAPPENS
October 25, 2026	Submission deadline	AI-generated research papers and the required workflow packages are due.
November 10, 2026	AI reviews and selection	Automated integrity checks, independent AI reviews, and AI meta-reviews are completed. The automated selection results are finalized and communicated; up to four papers are chosen.
Late November - early December	Human expert evaluation	Human experts independently evaluate the papers selected by the AI process.
December 14 or 15, 2026	PDW in Lisbon	Selected papers, automated reviews, human evaluations, and process evidence are presented and discussed.

The exact ICIS date and time will be announced when the conference schedule is finalized. Submission deadlines are 23:59 Anywhere on Earth unless otherwise announced.

PDW format

The 90-minute session will make both the AI-led production process and the automated evaluation process visible, with the required workflow appendices serving as central evidence. The emphasis is not on presenting polished papers alone, but on examining how the research, reviews, and selection were produced.

DURATION	ACTIVITY	DESCRIPTION
5 min	Opening	The organizers introduce the experiment, governance principles, automated review and selection design, and audience assessment.
40 min	Paper presentations	Up to four human authors or orchestrators give ten-minute presentations of the AI-generated papers and the underlying workflow, including prompts, interventions, failed outputs, and revisions.
40 min	Human expert evaluation and panel discussion	Human experts discuss the selected papers, compare their judgments with the AI reviews and selection rationales, and assess implications for quality, novelty, accountability, legitimacy, and future governance.
5 min	Closing	The organizers summarize the principal observations, planned outputs, and opportunities for follow-up work.

Presenters will be asked to draw explicitly on their workflow appendices and show selected prompts, workflow traces, failed and revised outputs, and AI-generated presentation materials. Human expert evaluations and audience reflections will help interpret the similarities and differences between automated and human scholarly judgment.

Eligibility and participation

The call is open to faculty members, doctoral students, postdoctoral researchers, research staff, and interdisciplinary teams interested in Information Systems and AI-enabled scholarship. Prior experience with sophisticated research agents is helpful but not required. At least one human author or orchestrator of each selected paper must register for ICIS 2026 and attend the PDW in person.

Submission procedure

Submissions should be made through OpenReview:

https://openreview.net/group?id=aisnet.org/ICIS/2026/PDW/Autonomous_Scholarship

The submission site will provide the paper template, workflow-documentation instructions, Human-AI Contribution Disclosure Form, Artifact Availability Statement, and detailed governance requirements.

Questions may be directed to nan.zhang@nd.edu.

Organizers

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Advisory Board

Nick Berente, Andrew Burton-Jones, Michael Rosemann, and Jan vom Brocke

A deliberately extreme experiment

The PDW does not presume that a fully automated publication process is desirable or inevitable. By temporarily removing human scholarly judgment from review and selection—and introducing it only after the automated choices have been made—the experiment creates a setting in which the potential and limitations of automated evaluation can be observed directly. We recognize that AI capabilities are evolving rapidly and that this experiment can provide only a snapshot of frontier models' capacity for scientific discovery at the time it is conducted.

We invite participants to approach the experiment with ambition, transparency, intellectual curiosity, and an appropriately critical perspective.

Provenance statement. *Consistent with the design of the PDW, the initial version of this call was generated using a generative AI system and subsequently reviewed and revised by the human organizers.*