2026 INTERNATIONAL TEST CONFERENCE

OCTOBER 11 - 16, 2026, SAN ANTONIO, TX, USA

Special Call for Proposal – AI in Test (AIT) Workshop

Artificial Intelligence (AI) is rapidly entering semiconductor-test practice. Engineers are using vibe coding, AI-assisted development environments, agentic coding assistants, custom agents, MCP-style service interfaces, and task-specific AI applications to accelerate or rethink engineering workflows. This call is not for individual papers.

The **AI in Test** (**AIT**) Workshop will be held on **October 15-16** during the **ITC Testweek**. **AIT** invites session proposals that examine how AI may transform major areas of semiconductor test. This call is not for individual papers. Each accepted proposal will organize one focused workshop session around a significant application area, with the goal of providing practical clarity on technology readiness, ROI, reliability, workforce impact, and adoption strategy.

The workshop aims to move beyond both hype and fear. AI can produce impressive results quickly, but fast output does not necessarily mean that a problem has been solved reliably. At the same time, the speed of AI-generated results raises serious questions about job content, engineering roles, organizational investment, and future skill requirements.

IMPORTANT NOTE ON SCOPE: A strong session should assess where AI is truly useful, where it is immature, how ROI and reliability should be evaluated, and how engineering work may change.

However, the objective of this workshop is not to reach definitive answers or predict the future impact of AI on semiconductor testing. The AI landscape is evolving too rapidly, and many technologies are still in their early stages of adoption. Instead, the goal is to help the community identify the right questions to ask, the appropriate evaluation criteria to apply, and the key uncertainties that organizations must consider when making technology, investment, and workforce decisions. Session organizers are encouraged to present evidence, observations, experiences, competing viewpoints, and open challenges rather than attempting to advocate a single conclusion.

Candidate Session Areas

AIT expects to accept approximately 4-5 session proposals. Each session should address a broad application area rather than a narrow point solution. Example areas include:

- Test-program requirements, generation, revision, maintenance, and evolution
- Test-data analytics, yield learning, debug support, and engineering reporting
- Test infrastructure, data services, MCP interfaces, and AI-ready workflow platforms
- Test operations, manufacturing optimization, scheduling, material flow automation and productivity improvement
- DFT, validation, silicon bring-up, diagnosis, reliability, and failure analysis
- Supply-chain, documentation, knowledge management, and cross-organization workflows
- AI agents, engineering copilots, app-based agents, and skill/workflow ecosystems for test engineering

Questions Each Session Should Consider

A session proposal should define a topic and explain how the session will guide discussion around the following questions:

- Technology assessment: What AI technologies are applicable to this area, and what is their current maturity?
- Investment strategy and ROI: Where should companies invest, and how should return be measured beyond token cost/speedup?
- Quality and trust: How should AI-generated results be evaluated for correctness, reliability, reproducibility, and engineering trust?
- Duplication versus real progress: When do similar AI solutions indicate duplication, independent validation, or necessary adaptation?
- Workforce impact: How may job content change, which tasks may be automated or augmented, and what new jobs may emerge?
- Future skills: What skills will be required for AI-native semiconductor-test organizations?

Submission Guidelines

Prospective organizers are invited to submit a 1-2 page session proposal. Submissions should include:

- Session title; organizer names, affiliations, and contact information
- Session abstract and description of the proposed topic and motivation
- Proposed session structure, such as invited talks, panel discussion, moderated debate, demonstrations, or audience interaction
- Expected speakers or speaker profiles, if known; expected takeaways for workshop participants

(Sessions are expected to be 60 to 90 minutes in duration)

Important Dates (AIT Workshop Session Proposals)

Session Proposal Submission Deadline (1-2 page PDF) **July 24, 2026**

Selection Considerations

Proposals will be evaluated based on relevance to semiconductor test, breadth of perspective, practical value to industry participants, clarity of the session plan, and potential to help the community understand how AI should be evaluated, trusted, scaled, and integrated.

For detailed information about the submission process, requirements and deadlines, the selection process and any other questions regarding the program itself or contact information, please consult the ITC web site at http://www.itctestweek.org.

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