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AvioSE'26



8th Workshop on Avionics Systems and Software Engineering
February 24, 2026, Bern, Switzerland

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Avionics is derived from the expression "Aviation Electronics". Software engineering for avionics systems is driven by safety. Its grand challenges are demanding fault tolerance and graceful degradation, increasing complexity, rising certification effort, and increasing cost and time pressures. The last decade of aviation is characterized by disruptive requirements for electrification and automation. New software development methodologies are required for fast adaptation of future applications, e.g., reduced crew operation, manned-unmanned teaming and formation flight. At the same time, there are still many unsolved issues in communication and navigation in airspace, certification of new target platforms, such as multi/many-core processors, artificial intelligence as well as cyber-security. The objective of the workshop is to foster the synergy between the software engineering and avionics systems community and provide a platform for exchanging new software engineering methods, tools, and techniques applied in avionics to accelerate innovation in aviation.

Topics (but not limited to):

- Vision/Position papers (e.g. future avionics technologies, engineering methods)
- Systems and software development approaches (e.g. model-based, ai-guided, agile, software-defined avionics)
- Software technologies (e.g. new languages, compilers, interpreters, frameworks, tools)
- Quality assurance methods (e.g. ai-based testing, formal methods)
- Product technologies (e.g. AI applications)

Modalities:

- One day interactive conference (language: English)
- Short paper or full paper
- Peer-review by international experts with extensive and excellent feedback
- Open access publication (one author must be registered for the workshop or full SE before the final manuscript deadline!)
- Keynotes and panel session

Dates:


Dec 01, 2025 -> Paper submission
Dec 23, 2025 -> Paper acceptance
Jan 16, 2026 -> Final manuscript

Further information and registration:
<https://aviose-workshop.github.io/>

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SOFTWARE ENGINEERING
Software Engineering Conference
23rd – 26th Feb 2026
<https://se2026.inf.unibe.ch/en/>


DLR
DGLR Q3.2 Avionik-Plattform, -
Hardware und-Systeme
<https://www.dglr.de/vernetzen/fachbereiche/verschnittsthemen/q3-avionik-und-missionstechnologien/q32-avionik-plattformen-hardware-und-systeme/>


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