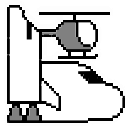
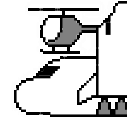


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AVIOSE' 25



7th Workshop on Avionics Systems and Software Engineering
February 25, 2025, Karlsruhe, Germany

*Andreas Schweiger**, *Umut Durak***, *Marina Reich**, *Björn Annighöfer****
Airbus, **German Aerospace Center (DLR), *University of Stuttgart*

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., advanced air mobility, aircrew (workload) reduction, and electric aircraft. 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, behaviour-driven, ai-guided, agile)
- Software technologies (e.g. new languages, compilers, interpreters, frameworks, tools)
- Quality assurance methods (e.g. ai-based testing, formal methods)
- Product technologies (e.g. applications of AI)

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:

- Oct 28, 2024 -> Paper submission
- Nov 28, 2024 -> Paper acceptance
- Dec 09, 2024 -> Final manuscript

Further information and registration:

<https://aviose-workshop.github.io/>



Software Engineering Conference
24th – 27th Feb 2025
<https://se2025.sdg.kastel.kit.edu>



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