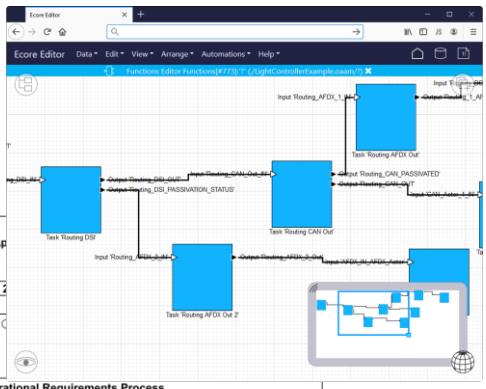
University of Stuttgart
Institute of Aircraft Systems

PhD/Doktorand*in (Wissenschaftlicher Mitarbeiter*in)



	Objective		Activity	Ap											
	Description	Ref.	Ref.	1	2										
1	The tool qualification need is established.	4.1	[Note 1]	❍	❍	❍	❍	❍							
	Tool Operational Requirements Process														
2	Tool Operational Requirements are defined.	5.1.1.a	5.1.2.a 5.1.2.b 5.1.2.c	❍	❍	❍	❍	❍	Tool Operational Requirements	10.3.1	①	①	①	①	②
	Tool Operational Integration Process														
3	Tool Executable Object Code is installed in the tool operational environment.	5.3.1.a	5.3.2.a 5.3.2.b 5.3.2.c	❍	❍	❍	❍	❍	Tool Executable Object Code Tool Installation Report	10.2.4 10.3.2	② ②	② ②	② ②	② ②	② ②
	Tool Operational Verification and Validation Process														
4	Tool Operational Requirements are complete, accurate, verifiable, and consistent.	6.2.1.a	6.2.2.a	●	●	❍	❍		Tool Operational Verification and Validation Results	10.3.4	②	②	②	②	
5	Tool operation complies with the Tool Operational Requirements.	6.2.1.b	6.2.2.c	●	●	❍	❍	❍	Tool Operational Verification and Validation Cases and Procedures Tool Operational Verification and Validation Results	10.3.3 10.3.4	② ②	② ②	② ②	② ②	② ②

PROJECT TALIA

PhD: Automated Tool Qualification in Avionics

Your opportunity to join the highly innovative, friendly, and international field of aircraft electronics and software:

Integrated Modular Avionics (IMA) are state of the art in modern air vehicles. IMA modules are generic computers that share resources between several safety-critical system functions by being configured. This configuration is, however, one of the most effortful tasks in modern air vehicle production. Many of the tasks could be automated by appropriate software tools. Owing to the safety-critical nature, the development of such tools exhibit, unfortunately, often the same effort as developing the system manually. In the research project TALIA it shall be investigated how the development and qualification of aerospace software tools itself could be automated. The focus is on tools and methods from the area of domain-specific modelling and transformation. These are known to bring significant benefits to development and are based on formal principles. The scope of the work may range from software architectures via algorithms to code and document generation.

Offered is a full position payed according to the German tariff (TV-L 13). A self-controlled management of project duties, publications, and technical and scientific progress is expected.

Preferred Profile

- PhD-eligable diploma or master in aerospace engineering or computer science
- Background in domain-specific modelling and transformation, code generation or software engineering
- Basic knowledge in aerospace safety and certification regulations

Application

Interested? Send your application including motivation, CV, and certificates to the email below. German or English both are fine.

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