PROJECT FACTSHEET

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MOSAICO

The goal of MOSAICO is to create a scalable framework for reliable, unbiased, and high-quality generative AI applications in software engineering.

Inspiration

In a world that demands faster development of better software, MOSAICO seeks to conciliate software engineering and the use of generative AI through the collaboration of human experts and AI agents.
The project aims at producing a holistic methodology and a set of solutions for the engineering and operation of communities of AIs across the SE life-cycle. The solutions will be brought together in an integrated MOSAICO platform, handling communication, orchestration, governance, quality assessment, benchmarking and reuse of AI agents.
MOSAICO will be integrated with existing development environments, to present the results to software engineers, and allow expert users to intervene in the AI decisions.

Innovation

By fostering collaboration between specialized AI agents and human experts, MOSAICO addresses key challenges in accuracy, bias minimization, and efficiency, validated through use cases in immersive technologies, finance, aerospace, and IoT.
At LIST, we are contributing to this vision by developing a policy language to express governance rules for the community of AI and human agents. The policy described will be enforced by an intelligent decision engine in charge of organising open discussions between Human and AI agents to reach an optimal solution.

Impact

The results of Mosaico will be integrated into our open-source BESSER platform. With BESSER you will be able to create the agents and the engine that will govern all the agents involved in the software development process, aiming at reaching a consensus among them whenever possible.
Thanks to the low-code approach supported in BESSER, the creation (and configuration) of agents will be accessible to people with different technical skills.
At the end of the journey, software engineers and citizen alike will be able to model software systems through open discussions with AI agents collaborating to propose and decide on a technical solution.

Partners

Institut Mines-Télécom (FR) , University of York (UK) , Netcompany-Intrasoft SA (LU) , Immersion (FR) , National Bank of Greece (GR) , Advanced Laboratory on Embedded Systems (Collins Aerospace) (IT) , CodiumAI (IL) , Unparallel Innovation (PT) , Eclipse Foundation (DE) , F6S network (IR) , University of l'Aquila (IT)

Financial Support

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