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Title: Enhancing AI development in the EOSC context: AI4EOSC and iMagine

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The AI4EOSC and iMagine projects are closely related initiatives under the European Open Science Cloud (EOSC), both designed to support research communities in leveraging artificial intelligence (AI).

The AI4EOSC project is dedicated to provide researchers with easy access to a comprehensive range of AI development services and tools. It focuses on enabling the development and deployment of AI models, including federated learning, zero-touch deployment, MLOps and composite AI pipelines. The architecture of the platform is designed to be user-friendly and covers different needs by integrating different frameworks and technologies. It also enables seamless sharing and deployment of AI models across distributed resources. By offering real-world examples and active community involvement, including collaboration with the iMagine project, AI4EOSC showcases how researchers can effectively use the platform to advance their AI development, highlighting its comprehensive capabilities and impact on the scientific community.

The iMagine AI platform is specifically developed for researchers in the field of aquatic science and based on the AI4OS software stack developed in AI4EOSC. It provides AI-powered tools for image analysis that contribute to the understanding and conservation of aquatic ecosystems. The same as AI4EOSC platform, iMagine platform supports the entire machine learning lifecycle, from model development to deployment, using data from multiple sources. iMagine is driven by ten core use cases for image analysis available to researchers via Virtual Access, as well as additional new use cases developed through recent open calls. The iMagine Competence Center plays a key role in supporting model development and deployment for these applications.

Together, AI4EOSC and iMagine are showing the power of AI within EOSC. They support research in various disciplines by providing robust computational tools and fostering collaboration for scientific progress.

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