Artificial Intelligence and Machine Learning for Official Statistics



Welcome to our first newsletter for ESSnet AIML40S! We are very excited to kick off what will be a series of newsletters from the AIML40S team, highlighting the progress, the results achieved, the event and all the news about this project

PROJECT OVERVIEW

The main objectives of AIML40S are to explore the use of Artificial Intelligence/Machine Learning (AI/ML) for the production of official statistics and to implement innovative solutions for statistical products and processes. This four-year project started in April 2024, with activities structured in the following work packages

OVERARCHING WORK PACKAGES

WP1 Project management and coordination
WP2 Communication and community engagement
WP3 ESS AI/ML lab: Technical infrastructure and organisational setup
WP4 Al/ML state-of-play and ecosystem monitoring
WP5 Standards, methodological and implementation frameworks
WP6

Knowledge repository and training material

In this issue our Kick-off meeting in Wiesbaden, AIML4OS Website, Datalab Webinar, NTTS2025 call for abstracts

USE CASES

WP7 AI/MI on earth observation data, satellite imagery
WP8 Statistically valid and efficient editing and imputation in official statistics by AI/ML – with a special focus on editing
WP9 Imputation focus - Statistically valid and efficient editing and imputation in official statistics by AI/ML - with a special focus on imputation
WP10 From text to code - Experiences and potential of the use of AI/ML for classifying and coding
WP11 Applying ML for estimating firm-level supply chain networks
WP12 Large language models
WP13 Generation of synthetic data in official statistics:

techniques and applications

KICK-OFF OF THE AIML40S PROJECT Innovation in Artificial Intelligence for Official Statistics

On April 2nd and 3rd, the kick-off meeting of the ESSnet One-stop-shop Artificial Intelligence and Machine Learning for Official Statistics (AIML4OS) was held at the Federal Statistical Office of Germany in Wiesbaden. During the meeting, the WP coordinators presented the planning activities and the expected intermediate results. This four-year project brings together a consortium of 15 countries with the goal of developing and sharing innovative solutions based on Artificial Intelligence and Machine Learning to enhance statistical products and processes.



Team Members at the AIML4OS Kick-off Meeting in Wiesbaden

Like other initiatives, this ESSnet promotes coordinated action to ensure the exchange of experiences, the identification of best practices, and the reuse of solutions across the entire European statistical system. It also acknowledges the significant contributions from private and academic research. Through this project, ESSnet expects significant progress in the quality and efficiency of official statistics, making data more accurate and timely. Stay tuned for updates on future developments and the first implemented solutions.

WEBSITE RELEASE Launch of the AIML40S Dashboard

We are excited to announce the launch of the new AIML40S Dashboard. This platform has been created to support the ESSnet One-stop-shop Artificial Intelligence and Machine Learning for Official Statistics project. The website provides comprehensive information about the project's goals, progress, and the innovative solutions being developed.

Users can explore detailed updates, access resources, and stay informed about upcoming events related to the project. The AIML40S Website aims to facilitate transparency and engagement, ensuring that stakeholders and the public can easily follow the advancements in this important initiative. Visit the <u>AIML40S</u> <u>Website</u> to learn more and stay up-to-date with the latest news and developments.

AIML4OS DATALAB PRESENTATION 7 November 2024, 10:00 AM CET

The webinar for the presentation of the European Datalab for AI/ML is scheduled for 7 November 2024, exclusively for the members of the consortium. The Datalab for AI/ML offers a wide range of computing resources, including GPUs, as well as ample storage space that will be shared to support the development of use cases under the various work packages. It features an extensive catalogue of services for direct data access and processing. Powered by Onyxia, an open-source project initiated at Insee, the Datalab enables organisations to deploy cutting-edge data science platforms based on cloud technologies. In principle, the Datalab is accessible to all European National Statistics Institutes (NSIs) and Other National Authorities (ONAs) at the <u>European Datalab</u> address.

If your organisation's domain name is not yet open for registration, please send an email to innovation@insee.fr. Additionally, the Datalab provides a dedicated space for sharing training courses and welcomes contributions from users or organisations. The webinar will be recorded for future viewing.



Measuring, understanding

AIML40S AT NTTS 2025 CONFERENCE Bruxelles 11-13 March 2025

We are pleased to announce that AIML40S project will be presented at the <u>NTTS 2025</u> (New Techniques and Technologies for Statistics) Conference (11-13 March 2025). The NTTS Conference is a prestigious event that brings together experts from various fields to discuss innovations in statistics and will be an excellent opportunity to showcase the results achieved by then. The AIML40S AIML40S participation is a great opportunity to gain visibility and foster engagement with public and private stakeholders.

We remind everyone that the call for abstracts is open until September 30th. All abstracts must be in English and will undergo a double peer review process and will be evaluated against the following criteria:

- Methodological soundness
- Relevance
- Clarity
- Practical application
- Originality and innovation

All the information about the conference is available <u>here</u>



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To stay informed about the latest developments of the project, please subscribe to the newsletter: essnet-aiml4os@istat.it

