Appl.AI virtual lab – contribute

Why

Artificial Intelligence is playing a central role in the technological and scientific progress. Within TNO, new AI methods and applications are developed transversally across all units and domains. The Appl.AI program tackles the need to unify all these efforts and properly position TNO in the AI field.

As a part of this project, a virtual lab has been developed and published here with the aim to show the results of the many AI-related projects we are working on in TNO. The lab has the twofold goal to facilitate the communication and sharing of knowledge inside TNO and to show our partners and customers our results.

Who

The webpage has been conceived as a community driven website. That means that everyone working on a AI relevant project who wants to present their results can contribute by creating a page for their project.

Among all the possible aspects that are relevant in the field of AI, the Appl.AI program focuses especially on two flagships:

- FATE - Operating in a human-machine team and in a responsible way
- SNOW - Making AI systems that operate reliable in an open world

A range of AI related projects are built on top of these two flagships projects. All of them are features in the App.AI lab. Additionally, all AI-related projects are also welcome to contribute. We aim to be inclusive.

What

Each project page should contain the following information:

- **Name of the project**: please use a name that is informative about the content of the project, even if different from the official name. One page could even refer to results obtained in two or more projects on the same topic.
- **One sentence description**: a short description to be used in the project-card in the homepage
- **Image of the project:** please select an horizontal image and be sure to check the copy rights of the image.
- **Description:** full description of the project, including the problem it addresses, the chosen approach and the results. Please consider that the website is accessible both outside and inside TNO.
- **Reference person:** Name, position, email address and picture of at least one reference person for the project
- **Extra content:** this include link/pdf of publications, Powerpoints, images, videos, link to online demos,… Remember that the idea of the website is to be a virtual lab, so the more

interactive the content is, the better! If you have specific content that is currently not supported, please let us know, and we will try to facilitate this.

- **Flagship:** FATE/SNOW depending which topic your project contributes to
- **AI Theme(s):** Currently the webpage covers three themes: Explainable AI, Human-Machine Teaming and Responsible AI. If you select a different theme, your project will still be visible from the 'all projects tab', but not from the 'themes tab'
- **Tags:** this is a free field; you can refer to technologies (e.g. 'Bayesian-Networks', 'Machine-learning'…), domains (e.g. 'Defense', 'Finance', ..), applications (e.g. 'predictive maintenance' ..), ..
- **Technology:** Currently the webpage covers three technologies: Deep Learning, Machine Learning and Natural Language Process. If you add a different technology, your project will still be visible from the 'all projects tab', but not from the 'technology tab'. If you want to contribute also by providing general information for a specific technology, please contact us.
- **TRL:** the technology readiness level of your project

How

To contribute with a new project or maintain a page, you need to request access to the gitlab repository ci.tno.nl/gitlab/ailab/virtual-lab [1] (see below the Contact section).

Once there you can follow the instructions and examples here.

Contacts

ApplAI program:

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- Johan Janssen – johan.janssen@tno.nl

AI-lab TNO and git repo:

- Joachim de Greeff - joachim.degreeff@tno.nl

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[1] In case you do not have a GitLab CI account, you can request one by writing an email to the IT service; in the email you should clearly state that you want access to the **ci.tno.nl gitlab**, as multiple environments are currently available.