Seeking industry partner for bias in AI call focusing on the labor market

The Department of Interdisciplinary Studies of Culture (KULT) at the Norwegian Institute of Science and Technology (NTNU) is searching for a partner to join our consortium for a proposal responding to the <u>HORIZON-CL4-2021-HUMAN-01-24: Tackling gender, race and other biases in AI (RIA) call</u>.

Our project will address bias in AI in the employment and labor sector, focusing on ethical concerns of AI and the technical development of bias identifying/preventing systems. The project will involve case studies in different labor sectors in different national contexts. The NTNU research team has good experience investigating how technological changes including AI affects the nature of work for individual workers as well as RRI practices. PI <u>Dr. Roger Søraa</u> leads NTNU's participation in the H2020 <u>Robotics4EU project</u> that is creating new methodologies for the social acceptance of robotic systems.

At a technical level, we plan to advance the state of the art of bias detection and mitigation for both traditional word embeddings (such as word2vec, GloVe, fasttext) and contextual word embeddings (such as transformer models and Google's BERT model). In particular, we are also interested in how the bias in word embeddings replicates or gets reinforced in applications (e.g. classifiers) based on the existing bias in the underlying embeddings. We are looking for a company that is using such publicly available word embeddings or the BERT model (or a variant of it) in labor management or that is interested in using it in the future and is therefore willing to setup a proof of concept with us. The precise aspect of labor management (e.g. recruitment, evaluation) will be determined in consultation with our industry partner. We are interested in speaking with both SMEs and larger industry organisations.

For a flavor of our research, please refer to several recent publications by PI Dr. Roger Søraa: <u>The social dimension of domesticating technology: Interactions between older adults, caregivers, and robots in the home.</u> <u>Mechanical genders: how do humans gender robots?</u> Exoskeletons for all: The interplay between exoskeletons, inclusion, gender, and intersectionality.

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