KU LEUVEN

INFORMATION LETTER

Research title:
Investigating Personalized Explanation Generation of Classes for Students Using LLMs

Name and contact information supervisor and researcher(s):
Supervisors:
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GENERAL OBJECTIVES OF THE RESEARCH

The main goal of this research is to investigate how personalized learning experiences, generated using advanced artificial intelligence models (Large Language Models, LLMs), affect students understanding, engagement, and overall learning experience in comparison to standard, non-personalized explanations. Specifically, we aim to determine whether the use of personalized explanations, based on student profiles, lecture materials, and audio recordings, can improve students academic performance and their learning experience.

Participants will be asked to complete a profile questionnaire, engage with an online learning platform, and provide feedback and demonstrate their learning outcomes through a knowledge test and user experience questionnaire.

INFORMATION ABOUT THE PROCESSING OF YOUR PERSONAL DATA

As a result of your participation in this study, personal data relating to you will be collected and processed. This processing will be done in accordance with the General Data Protection Regulation (GDPR). The following categories of personal data will be processed during this study:

- **Age, gender, academic background, educational history, leisure activities and interests, learning preferences, and goals.**

No special category data (such as medical data, racial/ethnic origin, political opinions, etc.) will be collected or processed in this study.

Use of your personal data

Only personal data required for the purposes of this study will be collected and processed. Data collected for this study will be pseudonymized. This means that data that can identify you such as **your name and email address** will be separated from other data and replaced by a unique random code. In this way, the data can no longer easily be attributed to you. Only the researcher can link the data to you by means of this unique code. However, this will only happen in exceptional cases; for example, if you request access to or rectification of your data. You will also not be identified in publications arising from the research.

The data will be processed on the basis of public interest. This research aims to enhance understanding of personalized learning methods, thus generating insights that benefit society and education. If you decide to stop participating, previously collected data can still be legally included in the study and does not have to be deleted by KU Leuven.

for **10 years** after the end of the study at a secure storage location at **KU Leuven**.

Your rights

You have the right to ask for more information about the use of your data. In addition, you may exercise the right to access and the right to rectify your data unless exercising these rights would render impossible or seriously impair the achievement of the research objectives.

If you wish to invoke any of these rights, please contact the researchers using the contact information at the top of this letter.

Reuse of your data

It may be possible that your pseudonymized data will be reused for scientific research by:

- Researchers and/or academic partners working with or receiving data from **KU Leuven** (including—under certain conditions—a master's or doctoral student).

Being able to make data available is essential for validating research findings and advancing scientific knowledge.

In case of reuse of your data, necessary contractual arrangements will always be made to protect your personal data and clearly define responsibilities in accordance with relevant legislation.

There will be transparent information about any reuse of your data. This will be done via **email**.

Any reuse will always comply with the applicable legislation and in accordance with KU Leuven policy. This policy ensures an independent body will monitor the protection of personal data and your rights.

Your pseudonymized data may also be made available on secure data platforms for further scientific research under strictly controlled access conditions, for example, in the context of research publications. The data platform ensures strict access control complying with applicable legislation.

It is possible that your pseudonymized data may be reused in teaching and academic lectures.

Contact details

For the purposes of this research, KU Leuven is the data controller. More specifically, only the researchers involved (**Mihai Bace, Maria Torres Vega, Yiman Wu, Furkan Ali Yurdakul**) will have access to your personal data. Should you have any specific questions about this study, including the processing of your personal data, please feel free to contact them using the contact details provided at the beginning of this information letter.

For further questions and concerns regarding the processing of your personal data, please contact the Data Protection Officer for scientific research at KU Leuven (dpo@kuleuven.be). When doing so, please specify the study concerned by mentioning the title ("Investigating Personalized Explanation Generation of Classes for Students Using LLMs") as well as the names of the researchers involved.

If, after contacting the Data Protection Officer, you would still like to lodge a complaint about the use of your personal data, you can contact the Belgian Data Protection Authority (**www.gegevensbeschermingsautoriteit.be**).