



Departmental Seminar

Through Students' Eyes: Unveiling Trust and Bias in AI-Generated Formative Feedback

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Monday, October 28th, 2024, 14:30 - 16:00

Lab 3, Feinberg Building, Weizmann Institute of Science

Abstract

The rise of Generative AI technology offers tremendous educational potential, but its successful adoption is often hindered by social and psychological factors rather than technological limitations. My post-doctoral research at École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, explores how students' perceptions and attitudes, especially trust and biases, affect their engagement with AI-generated formative feedback in real-world educational settings.

Drawing from empirical studies with over 1,000 STEM students at EPFL, I explore how the identity of the feedback provider—whether AI or human—affects students' evaluations of feedback content. The talk will cover whether students can distinguish between AI-generated and human-crafted feedback, how their perceptions change when the provider's identity is revealed, and the degree of bias against AI as a feedback provider. Additionally, I will examine how closely students' feedback evaluations align with expert assessments of feedback quality, as well as the specific features of formative feedback that students value. Finally, I will discuss how students' overall attitudes toward AI shape their evaluations of AI feedback compared to human feedback.

I will conclude by offering practical insights for designing more effective and trusted AI-driven formative feedback systems through integrating expert knowledge and supervision into AI-powered educational platforms. Additionally, I will discuss my future research, which aims to evaluate the effectiveness of these systems by assessing their impact on student learning outcomes and examining potential shifts in student perceptions after their prolonged use.