

AMA Seminar Series on Young Scholars in Optimization and Data Science

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Topic

Control the Risk for Misuse of AI in Science

Date | Time

1 February 2024 (Thursday) | 02:00pm – 03:00pm (HK Time)

Zoom

<https://polyu.zoom.us/j/91824978203?pwd=M1IxbnFrUjJOWWV3bkFhMDFVbGxGZz09>

Meeting ID: 918 2497 8203

Passcode: 0201

Abstract

The rapid expansion of Artificial Intelligence (AI) in scientific research brings both extraordinary opportunities and significant risks. Misuse of AI in science can lead to serious issues, such as the creation of harmful materials or bypassing regulations. This study emphasizes the importance of responsible AI use in scientific fields, detailing the risks through examples from chemical science. To mitigate these risks, we introduce SciGuard, a system to control AI misuse, and SciMT-Safety, a benchmark for evaluating system safety. SciGuard effectively minimizes harmful impacts while maintaining performance. We advocate for a joint, multidisciplinary effort to ensure AI's safe and ethical application in science, aiming to foster a balanced discussion among various stakeholders on the ethical use of AI.