

## The Application of Machine Learning Techniques in Language Assessment Research and Practice

## Dr Xun Yan

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Venue: Room 408-410, Meng Wah Complex, HKU

Chair: Professor Chun Lai

Registration:

https://hkuems1.hku.hk/hkuems/ec\_regform.aspx?guest=Y&ueid=95880



## **Abstract**

Recent advancements in generative artificial intelligence (AI) tools, such as ChatGPT, have revolutionized traditional methods and introduced new possibilities in language teaching, learning, and assessment. Al literacy has also become a buzzword in teacher education. Although AI might seem like a novel term in language education, the core techniques behind AI, particularly machine learning, have a much longer history in this field, especially in language testing and assessment. In this seminar, I will provide a historical overview of the use of machine learning in language testing and assessment. Following this, I will explore the challenges and opportunities presented by AI-based technologies in local university contexts. I will argue that the adoption of AI-based language assessments must be critically evaluated in light of the specific needs and resources of the local context. To illustrate this, I will present two case studies demonstrating the application of machine learning in language testing research and practice within local contexts. Finally, I will discuss the implications of AI-based technologies for language assessment literacy among various stakeholder groups.

## About the speaker:



**Xun Yan** is an associate professor of Linguistics, Second Language Acquisition and Teacher Education, and Educational Psychology at the University of Illinois at Urbana-Champaign. He is a faculty member in the Beckman Institute for Advanced Science and Technology. He received his PhD degree in second language studies from Purdue University and is a language tester by training. At UIUC, Xun is the director of the undergraduate program in Linguistics + TESOL and the supervisor of the English Placement Test and the English Proficiency Interview. Xun's research interests include speaking and writing assessment, psycholinguistic approaches to language testing, and language assessment literacy. His work has been published in journals including *Applied Linguistics, Assessing Writing, Foreign Language* 

Annals, Journal of Second Language Writing, Language Assessment Quarterly, Language Learning, Language Testing, System, and TESOL Quarterly. He is a co-editor for Language Testing and the past Brief Research Reports for TESOL Quarterly. Xun was the recipient of the ETS TOEFL Essentials New Scholar award in 2022, UIUC's LAS Alumni Distinguished Professorial Scholar Award in 2024, Conrad Humanities Mid-Career Scholar Award in 2022, and Lincoln Early-Career (LEAP) Scholar Award in 2018.