

IST Seminar Series Presents:



Exploring AI's Potential to Assist Research

Dr. Wenpeng Yin

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Monday, November 17, 2025 from 1:00PM-2:00PM (Central Time)

> Join Online: MS Teams (see link below)

https://teams.microsoft.com/l/meetup-

join/19%3ameeting_Mjk0YjIxODQtZTE2Mi00OThiLThkNTUtYWVmOGMwNWIxNGZl%40thread.v2/0?context=%7b%22Tid%22%3a%22170bbabd-a2f0-4c90-ad4b-

0e8f0f0c4259%22%2c%22Oid%22%3a%22c9f8dd10-bdbf-4c7a-bc65-d4bc72037cbe%22%7d

Meeting ID: 284 797 504 209 3

Passcode: QU9zD3Uv

Abstract: All is rapidly becoming a transformative force in scientific discovery and national competitiveness. Beyond automating routine tasks, All has the potential to reshape how we conduct research—assisting, accelerating, and even automating the entire process of scientific discovery. This talk explores two dimensions. First, **Al for Al research**: how All can push its own boundaries by generating equations, designing experiments, critiquing papers, and assisting in scientific writing. Second, **Al for science** more broadly: how All might propose novel mathematical solutions beyond existing methods, advance high-resolution image understanding across disciplines, and distill Coupled Differential Equations from complex time-series data. Together, these directions point to a bold future: All not just as a tool, but as a true intellectual partner in research—augmenting creativity, accelerating discovery, and helping us tackle the hardest open problems across STEM.

Biosketch: Dr. Wenpeng Yin is an Assistant Professor in the Computer Science & Engineering Department at Penn State University. He previously held roles as a faculty member at Temple University, Senior Research Scientist at Salesforce Research, and postdoc at UPenn. His research covers large language models, reasoning, and AI for science, with multiple paper awards, and he regularly serves as Senior Area Chair for top NLP venues such as EMNLP and ACL Rolling Review.