

SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

College of Design & Engineering

Website: <https://cde.nus.edu.sg/ece/>

Area: Signal Analysis and Machine Intelligence

Host: Associate Professor Xinchao Wang

Jointly organized with Learning and Vision Lab

TOPIC	:	Algorithmic Trading with Large-Scale Deep Learning
SPEAKER	:	Professor Atlas Wang Zhangyang
DATE	:	15 July 2026 (Wednesday)
TIME	:	3:00PM to 4:00PM
WEBINAR	:	E4-04-03

ABSTRACT

At XTX Markets, we view algorithmic trading as one of the most compelling real-world frontiers for deep learning and foundation models. Every day, our systems generate forecasts for tens of thousands of financial instruments and execute over \$300B in global trading volume: fully automated, with no discretionary human intervention. This domain combines massive data scale with high noise, adversarial dynamics, and frequent regime shifts, making it both scientifically challenging and commercially impactful. For machine learning researchers, it serves as a rigorous proving ground where advances in time-series modeling, large-scale optimization, representation learning, and foundation models can translate directly into measurable real-world outcomes. This talk will provide a high-level overview of our research agenda, infrastructure, and key open challenges at the intersection of large-scale AI and quantitative finance.

BIOGRAPHY

Dr. Zhangyang “Atlas” Wang is the Research Director at XTX Markets, one of the world’s leading high-frequency trading firms. He founded and leads the firm’s AI Lab in New York City, focused on developing large-scale foundation models for financial time series and market data, powered by XTX’s proprietary AI infrastructure. He is currently on leave from his position as the Temple Foundation Endowed Associate Professor at The University of Texas at Austin. His academic research has received a number of awards, and he has mentored a broad network of Ph.D. students and postdoctoral researchers. Many of his alumni now hold tenure-track faculty positions (nine to date) or senior research roles in industry (twenty-one and counting). For more information about his group and alumni, please visit: <https://www.vita-group.space/team>