

## SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING  
COLLEGE OF DESIGN AND ENGINEERING

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

**Area: Signal Analysis & Machine Intelligence**

**Host: A/Prof Thomas Yeo**

### Research Webinar

<b>TOPIC</b>	:	<b>Towards Data-Efficient, Compute-Efficient, and Verified Robust Learning</b>
<b>SPEAKER</b>	:	<b>Mr Yue Xiangyu Graduate Student, Electrical Engineering and Computer Science, UC Berkeley</b>
<b>DATE</b>	:	<b>Tuesday, 1 March 2022</b>
<b>TIME</b>	:	<b>10.00AM to 11.00AM</b>
<b>WEBINAR</b>	:	<b>Join Zoom Meeting</b> <a href="https://nus-sg.zoom.us/j/4156763801?pwd=NUwzUWhwdlZlcGt3cmhyTzFld1V0QT09">https://nus-sg.zoom.us/j/4156763801?pwd=NUwzUWhwdlZlcGt3cmhyTzFld1V0QT09</a> <b>Meeting ID: 415 676 3801</b> <b>Passcode: 662108</b>

### ABSTRACT

The renaissance of AI has mostly been supported by three key factors: more labeled data, more compute, and more complex neural nets. However, labeled data are not always available; computing hardware has been dwarfed by the scale of large models; and model behaviors are unpredictable, which is a key problem in safety-critical scenarios. In this talk, I'll present the works that I have done to mitigate these issues. The work spans self-supervised learning, transfer learning, efficient models, neural network pruning, formal methods, programming languages, etc; and contributes towards more data-efficient, compute-efficient, and verified robust learning.

### BIOGRAPHY

Xiangyu Yue is currently a Ph.D. candidate in Electrical Engineering and Computer Science at UC Berkeley. Before coming to Berkeley, he received B.S. at Nanjing University and M.S. at Stanford University. His research interest broadly lies in Machine Learning, Transfer Learning, Efficient Learning, Explainable Learning, with applications in Autonomous Driving, Robotics, Medical Imaging, etc. According to Google Scholar, his papers have gotten 2600+ citations with H-index 16. Due to his research, He has received the Berkeley EECS student award: Lotfi A. Zadeh Prize.

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