

# DBDS Workshop in Biostatistics

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(In Person & Virtual access Password: 62119)

DATE:	April 7, 2022
TIME:	1:30-2:30pm
TITLE:	Improve accessibility and fairness in healthcare using generalizable artificial intelligence
SPEAKER:	<b>Dianbo Liu</b> Postdoc fellow and leader of humanitarian AI team, Prof. Yoshua Bengio Group, Mila -Quebec AI institute, Canada and Research affiliate, The Broad Institute of MIT and Harvard, USA

## Abstract:

Recent advances in machine learning provide opportunities to improve accessibility, fairness, and efficiency of our healthcare systems. One challenge remains is that many machine learning models do not perform equally well on different groups of patients, which is called the problem of generalization. In this talk, we will first discuss the development of a machine learning based large scale screening tool for severe mental illnesses built using 800 million individuals' medical records and related generalization difficulties. Second, we will explore possible approaches to improve generalization of modular machine learning architectures using inductive biases learned from cognitive sciences.

## Suggested Readings:

The papers related to the talk are:

- 1)<https://www.sciencedirect.com/science/article/abs/pii/S1098360021024576>
- 2)<https://proceedings.neurips.cc/paper/2021/file/10907813b97e249163587e6246612e21-Paper.pdf>
- 3)<https://www.sciencedirect.com/science/article/pii/S1532046419302102>