

数学与系统科学研究院
计算数学所网络学术报告

报告人: 程光 校长讲座教授

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报告题目:

Nonparametric Perspective on Deep Learning

邀请人: 刘歆 研究员

报告时间: 2020 年 11 月 20 日 (周五)

晚上 19:00-19:35

报告工具: 腾讯会议 (ID: 521 3538 2330)

会议密码: 311311

Abstract:

Models built with deep neural network (DNN)
can handle complicated real-world data

extremely well, without suffering from the curse of dimensionality or the non-convex optimization. To contribute to the theoretical understanding of deep learning, we will investigate the nonparametric aspects of DNNs by addressing the following questions: (i) what kind of data can be best learned by deep neural networks? (ii) can deep neural networks achieve the statistical optimality? (iii) is there any algorithmic guarantee for obtaining such optimal neural networks? Our theoretical analysis applies to two most fundamental setup in practice: regression and classification.

Bio:

Guang Cheng is currently Presidential Chair Professor in the Chinese University of Hong Kong, Shenzhen, while being on leave from Purdue University. His research interests includes deep learning theory, statistical machine learning and high dimensional statistics. His academic achievements include IMS Fellow, Simons Fellow in Mathematics and NSF CAREER award.

欢迎大家参加!