## Cover Letter

June 27, 2017

Dear Editor-in-chief,

We are here submitting a research paper entitled "Approaching The Limit of Learning".

In the submitted work, we aim to investigate strategies that approach the best predictive power offered by a set of possibly nonlinear statistical models. To that end, we introduced a concept called the limit of learning, and studied a method to asymptotically approach it. Our rigorous analysis justifies the use of Takeuchi information criterion for general mis-specified model classes. We also proposed a sequential model expansion strategy for reliable online prediction with low computation cost. We hope that the new ideas will also shed some light on the statistical reliability and reproducibility of nonlinear machine learning systems in general.

Since the topic falls into the "statistical learning" category, we suggest Dr. Negar Kiyavash as the associate editor.

We would like to express our sincerest thanks for your time and considerations.

Best regards, Jie Ding, Enmao Diao, Jiawei Zhou, and Vahid Tarokh Harvard University