

### The Hong Kong University of Science and Technology

### **Department of Mathematics**

## **MPhil THESIS EXAMINATION**

# Study on Automated Machine Learning Application

By

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#### <u>ABSTRACT</u>

With the development of science and technology, there is an increasing number of tasks which use machine learning algorithms for analysis. The use of machine learning needs professional experience, and some of the processes are time consuming. Automated machine learning (AutoML) is designed for automating the machine learning tasks, while it aims to save time for other important procedures such as data collection and model evaluation. In this thesis, we will introduce some open source AutoML frameworks and test them with the S&P 500 Index. The innovation of this study is the use of ensemble learning to optimize the AutoML frameworks.

Date	•	25 May 2021, Tuesday
Time	:	2:30 p.m.
ZOOM Meeting	•	https://hkust.zoom.us/j/97159946519
		(Passcode: 123456)
Thesis Examination	on	Prof. Dong XIA (Chairman)
Committee	:	Prof. Kani CHEN (Supervisor)
		Prof. Jiheng ZHANG (Supervisor)
		Prof. Man Yu WONG
(0)		

(Open to all faculty and students)

The student's thesis is now being displayed on the reception counter in the General Administration Office (Room 3461).