



THE UNIVERSITY OF  
**CHICAGO**

Department of Statistics

MASTER'S THESIS PRESENTATION

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Neural Networks for Handwritten Chinese Character Recognition

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Jones 304, 5747 S. Ellis Avenue

#### ABSTRACT

Handwritten Chinese character recognition is a topic with important real-life applications that has been studied for decades. Traditional machine learning models and deep neural networks have been fitted to datasets of handwritten Chinese characters with mixed results. In this research project, the effect of adopting a smaller convolutional neural network for the handwritten Chinese character recognition problem is explored. The main finding is that, by fitting a simplified version of the VGG-16 neural network model to a handwritten Chinese character dataset, the training time can be reduced to a fraction of that of other deep neural networks, while a test accuracy of above 90 percent can be maintained.