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# A HILL-CLIMBING ALGORITHM TO CONSTRUCT NEURAL NETWORK AUTOMATICALLY – TESTED ON MNIST

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OPEN SOURCE PAPER

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October 15, 2021

## ABSTRACT

Deep learning models are usually constructed by human, based on their intuition. If we can develop a automatically method to construct neural network model, maybe we can construct some models that's difficult for human to build. A method based on Hill Climbing Algorithm is use to build Neural Network model automatically. In this paper, we propose a method based on Hill-Climbing Algorithm to construct neural network model automatically.

**Keywords** Neural Network · Deep Learning · MNIST · Auto Construct

## 1 Introduction

## 2 Background

[1,2] and see [3].

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Hasselmo, et al. (1995) investigated...

<https://www.ctan.org/pkg/booktabs>

## 3 Method

### 3.1 Measure: The height of Hill Climbing Algorithm

## References

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