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

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Chung-Chen Chen

Department of Computer Science and Information Engineering
Nation Quemoy University
Kinmen, Taiwan
ccc@nqu.edu.tw

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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

3 Method

3.1 Measure: The height of Hill Climbing Algorithm

References