## conferenceseries.com

## 5<sup>TH</sup> WORLD MACHINE LEARNING AND DEEP LEARNING CONGRESS and WORLD CONGRESS ON COMPUTER SCIENCE, MACHINE LEARNING AND BIG DATA August 30-31, 2018 Dubai, UAE

## NumPyCNNAndroid: A library for straightforward implementation of convolutional neural networks for android devices

Ahmed Fawzy Mohamed Gad Menoufia University, Egypt

A new open source library called NumPyCNNAndroid is proposed that minimizes the overhead of building and running convolutional neural networks on android devices. The library is written in Python 3. It uses Kivy for building the application interface and numerical python for building the network itself. The library supports the most common layers. Compared to the widely known deep learning libraries, NumPyCNNAndroid avoids the extra overhead of making the network suitable for running on mobile devices. The experimental results validate the correctness of the library implementation by comparing results from both the proposed library and TensorFlow based on mean absolute error.

ahmed.f.gad@gmail.com

Notes: