

Computer Science & Information Systems

## Deep Learning - Lab sheet - Module 1

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### EXERCISE 1 - INTRODUCTION TO TENSORFLOW

## 1 Objective

The objective is to

- install Tensorflow and Keras library.
- understand Tensorflow library.

## 2 Installation

### 2.1 Check if the following libraries are installed

- scipy
- numpy
- matplotlib
- pandas
- statsmodels
- scikit-learn

### 2.2 Install Tensorflow

- `pip install -c conda-forge tensorflow`

### 2.3 Install Keras

- `pip install keras`

## 3 Tensorflow

- Compute the function using Tensorflow library.

$$f(x, y) = x^2 + y + 2$$

## 4 Expected Results

- Tensorflow was installed correctly.
- Evaluate a function using Tensorflow.
- View the Tensor graph.