18.05.2017

DNN hands on challenge - HW 4

<u>Due date: 25.5.17</u>

<u>Goal for this HW:</u> Use non glucose features for prediction

General Submission Notes
1. Submission in **PDF** format only. **File name** should **include your name**.
2. Submission in pairs (one per group).
3. Send everything to both: niv.haim at weizmann ac il & hadar.gorodissky at weizmann ac il

Task
As explained in class, include in your training data at least two out of the three following datasets:
- Meals and Testfood
- Measurements
- Time of the day

Write Report

A. Describe your work flow

- What problems did you encounter throughout your work?
- How did you try to improve your scores?
    - What was your initial implementation?
    - What did you change?
    - What made you change it (intuition, trial and error etc.)?
    - How did that improve/worsen your score?

(These are some guidelines to get you started. You can describe your work in whatever manner you want as long as it is **succinct**)

B. When describing your nets pay attention to the following terms

1. **Input:**
    - What features did you use in your training?

○ Did you normalize your data and how?
2. **Architecture:**
    ○ How did you insert the different input types into the net? Did you use the same weights for all data types?
    ○ For each layer: size, activation function, initialization
3. **Optimizer:**
    ○ Which one did you use?
    ○ What parameters did you use?
    ○ What learning rate approach did you use?

Whenever possible, write the <u>reasons</u> why you chose this parameter - "theoretical", "intuition" or trial and error. explain briefly what you tried or what was your intuition about it.

** We would ask those of you with an interesting story to present your work to the class (with your approval) as a basis for discussion and for the benefit of all **

Have fun! :)
        Hadar & Niv