Problem Set & Computer Exercise 8

Dec. 2, 2021

- **Choose at least one task among the following 4 optional tasks:**

1. (optional) Write an essay on Hopfield Network with full mathematical developments. All references should be cited properly.

2. (optional) Write an essay on RBM with real-valued and/or count variables with key mathematical developments. All references should be cited properly.

3. (optional) Find a package of Hopfield Net in Python and a demo task with real data, and do the computer exercise on the task. Write an essay with descriptions on the package usage, descriptions of the task and data, and report on the experiment procedure and results.

4. (optional) Find a package of RBM in Python and a demo task with real data, and do the computer exercise on the task. Write an essay with descriptions on the package usage, descriptions of the task and data, and report on the experiment procedure and results.

Due date: Dec. 15 (Wednesday) 23:00 Beijing time