Introduction to Computer Science Data Science - Assignment 1

Ali Akbar Septiandri Teknik Informatika Fakultas Sains dan Teknologi Universitas Al Azhar Indonesia aliakbars@live.com

December 18, 2017

Due date: Sunday, 17 December 2017 at 23:59

Submission instructions: Submit your answers by sending an e-mail to aliakbars@live.com with the subject "ICS - NIM". The name of the attached file on your e-mail should be formatted as assignment_ds1_NIM.pdf.

Collaboration: Do not collaborate with other students on the assignment. This is an individual assignment.

Misconduct: Any misconduct in this assignment will be punished accordingly.

Write a 1-2 page summary of "Machines That Think for Themselves" by Yaser S. Abu-Mostafa. You can answer these questions from what you have read to help you write the summary:

- 1. In your own terms, what is machine learning?
- 2. Can a bunch of pre-defined if-else statements be called machine learning algorithms? Why or why not?
- 3. What are the challenges in producing machine learning models from the algorithms?
- 4. What is reinforcement learning?
- 5. What does it mean when a model overfits the data?