BS6213

Reflective scientist

Assessment arrangements for the part led by Professor Wong Limsoon
Course objective

Sharing with students how scientists do their thinking

The specific research / papers that an instructor uses for discussion serves mainly as a scaffold for that sharing to take place

A research paper usually just describes the problem being solved, the solution, and the results; it hardly ever explains how the authors did their thinking to come up with it. We want to fill this gap
Course plan

Session #1, 15 Jan 2024 and Session #2, 22 Jan 2024

Protein function prediction and some lessons for classifier performance evaluation

Session #3, 29 Jan 2024 and Session #4, 5 Feb 2024

Gene expression analysis and some lessons for statistical hypothesis testing

Details available on https://www.comp.nus.edu.sg/~wongls/courses/bs6213/2024/readme.html
Assessment plan

2 homeworks for sessions 1 & 3

2 x 35% marks for the reports

Class interactions

2 x 5% marks for interactions in sessions 1 & 3

2 x 10% marks for presentations & interactions in sessions 2 & 4

Please submit a 1-page interaction report within 72 hours after each session to get interaction marks.
Interaction report

1-page report submitted within 72 hours after a session

Provide a record of the questions you have PERSONALLY ASKED or PERSONALLY RESPONDED TO in a session

Provide your reflection on what you have learned from these interactions and from the session

No need to submit a report for a session if you have not participated in any interaction in that session
Homework #1, due 21/1/2024


Write a 1-page review report focusing on the way it evaluated the performance of the proposed cyclin classifier

Submit the report by email to wongls@comp.nus.edu.sg

Make 5-10 minutes presentation to the class on 22/1/2024
Homework #2, due 4/2/2024

Read [Srihari et al., "Inferring synthetic lethal interactions from mutual exclusivity of genetic events in cancer", Biology Direct, 10:57, 2015]

Write a 1-page review report focusing on the way it tests for synthetic-lethal gene pairs. Discuss whether their test is a good one.

Submit the report by email to wongls@comp.nus.edu.sg

Make 5-10 minutes presentation to the class on 5/2/2024