# Algorithm Design and Analysis LAB Introduction

YAO ZHAO

# About me

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# Student assistants

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# Knowledge, Ability and Skill Requirements

- Algorithmic Learning : Proficiency in the presentation, solution and proof of algorithmic problems described in textbook.
- Algorithmic Description: Ability to describe the process of algorithms using flow chart, pseudocode or other methods.
- Algorithmic Implementation: Ability to Implement Algorithms.
- Algorithmic Design and Analysis: Ability to design algorithms for given problems and prove their correctness, analyze their time and space complexity

# Content

- Explanation of key knowledge points
- Do some exercises
- Solutions of lab assignments and exercises or other extended questions
- Collect and explain the most concentrated problems
- Experience sharing

# Requirements Of Lab Assignment

- Due to the free withdrawal of the first three weeks, the DDL of all the lab and theory assignments in the first three weeks will start from the fourth week.(that is, **The DDL will not be earlier than March 5**.) But all the students have the same criteria. Since the students who are expected to take this course, they should submit lab and theory assignment on time. They should not delay submission time due to the late course selection.
- Only one lab assignment one week, Only one DDL. One assignment contains two questions except the first two weeks. No late submission is allowed. (The latest time is the DDL. We will not accept submissions later than this time.). If you exceed the DDL, the score of the assignment will be 0.
- All important notices are sent on Blackboard platform.

# Introduction to lab assignment

- This course is intended to judge the lab assignments online, which requires that you should strictly comply with the requirements of the question. We will supply a complete and clear description of the question, as well as the format of input and output.
- In order to encourage students to **do the right thing right the first time**, the second question will be penalized if you submit your code more than one time. If your first submission passes all the test cases, you will get the full score; otherwise, according to the number of submissions, the score will **be deducted 5 points per submission**. The final grade is the best grade you have achieved.
- An example:

If you pass 60% test cases at first, you can get 60.

At second submit, you pass 95% cases, you will get 95-5 = 90.

At third submit, you pass 90% cases, you will get 90-10 = 80. Finally, you will get 90.

- If we find some problems in our own code or system, we will fix these problems as soon as possible, the number of submissions of all participants will be reset to 0 accordingly.
- ADOJ:https://adoj.hguandl.com/d/CS208/

# Introduction to lab assignment

- The scoring criteria of lab assignment: 10 test cases are prepared for each assignment. If you pass one test case, you will get 10 points. In order to pass a test case, not only the output results are the same with the standard answer, but also satisfy the running time and space requirement.
- Please **submit your assignment in advance** so as not to submit fail or exceed DDL.
- Lab:40%

# Do the right thing right the first time

- When you have ability to write out code , it is very important that you have the ability to ensure your code is correct.
- You need to write test cases for your own code independently
- There is only one question one week. It is very clear what knowledge you need, and the time is sufficient.

# Requirements Of Theory Assignment

- Mr. Shi will assign theory assignments at irregular intervals.Please submit your theoretical homework on time. Theory assignment will be posted on **Blackboard**.
- You can upload scanned files with handwritten answers or submit Word or PDF documents.
- **Only one DDL. No late submission is allowed.** (The latest time is the DDL. We will not accept submissions later than this time.). **If you exceed the DDL, the score of the assignment will be 0.**

- **Don't copy**, you can't copy online reference answers, you can't copy other students‘ homework.
- Assignment:20%

# Plagiarism Policy

- From Spring 2018, the plagiarism policy applied by the Computer Science department is the following:
- * If an undergraduate assignment is found to be plagiarized, the first time the score of the assignment will be 0.
- * The second time the score of the course will be 0.
- As it may be difficult when two assignments are identical or nearly identical who actually wrote it, the policy will apply to BOTH students, unless one confesses having copied without the knowledge of the other.

# What is OK, and what isn't OK?

- It's OK to work on an assignment with a friend, and think together about the program structure, share ideas and even the global logic. At the time of actually writing the code, you should write it alone.
- It's OK to use in an assignment a piece of code found on the web, as long as you indicate in a comment where it was found and don't claim it as your own work.
- It's OK to help friends debug their programs (you'll probably learn a lot yourself by doing so).
- It's OK to show your code to friends to explain the logic, as long as the friends write their code on their own later.
- **It's NOT OK to take the code of a friend, make a few cosmetic changes (comments, some variable names) and pass it as your own work.**

No excuse will be accepted once plagiarism is discovered!