CS 4801/8801 Programming Interview Preparation Fall 2020

Class Sessions

1 Credit Hour Hybrid-mode (subject to change after Phase 2) Full support on remote learning 11:00 am - 11:50 am Friday (Location TBD)

Instructor

Sehoon Ha Office: TSRB 230A sehoonha@gatech.edu

Textbook

The textbook is optional, but the lecture will loosely follow the materials of the following book: Cracking the Coding Interview: 189 Programming Questions and Solutions 6th Edition by Gayle Laakmann McDowell

Grading

Homework: 50% Mock interview: 40% Class participation: 10%

Course Topics

This course aims to develop problem-solving skills that are required for programming interviews at most of major IT companies. It mainly discusses the fundamental algorithms and communication skills, rather than focusing on specific companies or job positions. Course topics include the overview of programming interviews, complexity analysis, data structures, algorithms, which are followed by example problems.

Homework

Each student will complete 1 to 3 interview questions every week. The students can submit the report in high-level pseudocode, not full scripts that are copy-and-pasted. The students can freely choose any programming language (e.g., Pencil-and-paper, C/C++, Python, Ruby, Java, Go...). Each report will be evaluated based on in-depth thinking on the problem, not based on the optimality of the solution. The students are not recommended to discuss the problem with other students, which will not be beneficial at real programming interviews.

Mock Interviews

Around the mid-term and final exam periods, the class will hold mock interview sessions between students. Each student will participate in two mock interviews: one session as an interviewer and another session as an interviewee. Each session will be evaluated based on the shared solution document and self-evaluations.

Class Participation

Class presence and participation points (10%) are given to encourage your active class participation and discussion. Students who repeatedly arrive late to the lecture or recitation will be eligible for 60% of the participation grade. If necessary, please the instructor a brief e-mail to explain their absence in advance.

Late Policy

The grade on a late assignment will drop 5% for each day beyond the due date. A day ends exactly at 11:59pm. No late assignments will be accepted four days or later after the date that the assignment was Due.