

CSE 421: Introduction to Algorithms

Course Overview

Shayan Oveis Gharan

Administrativa Stuffs

Lectures: M/W/F 1:30-2:20

Zoom Id: <https://zoom.us/j/166376509>

Office hours: M/W 2:30-3:20, T 4:30-5:20

<https://washington.zoom.us/j/5948822807>

Discussion Board: Use Piazza

<http://piazza.com/washington/spring2020/cse421>

CSE 421: Introduction to Algorithms
Winter, 2018

Shayan Oveis Gharan

MWF 2:30-3:20, 360H 399
Office hours in CSL 639
M/W/F 3:30-4:20

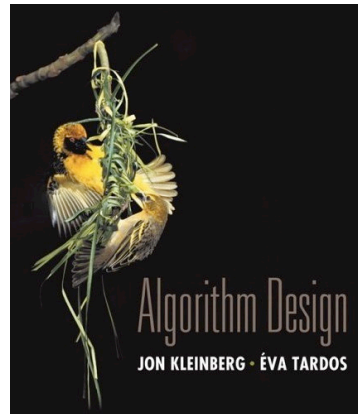
Textbook:

Algorithm Design by Jon Kleinberg and Eva Tardos, Addison-Wesley, 2006.
We will cover almost all of chapters 1-8 of the Kleinberg/Tardos text plus some additional material from later chapters. In addition, I recommend reading chapter 9 of *Introduction to Algorithms: A Creative Approach*, by Udi Manber, Addison-Wesley 1999. This book has a unique point of view on algorithm design.

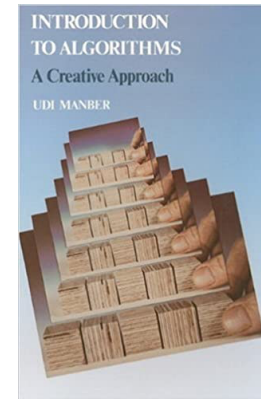
Another handy reference is Steven Skiena's *Stonybrook Algorithm Repository*

Grading Scheme (Roughly):

Homework 50%
Midterm 15-20%
Final Exam 30-35%



Course textbook



Supplementary text 2

cs.washington.edu/421

TAs

<u>Anny Kong</u>	Mon 11:30-12:20	<u>7980928356</u>
<u>Andrey Ryabtsev</u>	Mon 3:30-4:20	<u>5690154666</u>
<u>Jason Shiyoji Waataja</u>	Tue 10:00-10:50	<u>4237094217</u>
<u>Liangyu Zhao</u>	Tue 12:30-1:20	
<u>Ansh Nagda</u>	Tue 1:30-2:20	<u>3246340598</u>
<u>Joy He</u>	Tue 3:30-4:20	
<u>Ivy Wang</u>	Wed 9:30-10:30	<u>2597803488</u>
<u>Siddharth Vaidyanathan</u>	Wed 3:30-4:20	<u>9225427905</u>
<u>Xihu Zhang</u>	Wed 4:30-5:20	<u>8563721386</u>
<u>Sally Dong</u>	Thu 10:30-11:20	<u>6744319699</u>
<u>Alex Fang</u>	Thu 11:30-12:20	

Grading

- Weekly HWs, First HW due April 9th
- Submit to Canvas
- Midterm (05/04/2020), Final (06/08/2020)
 - Exams are open book, open note, no internet access
 - Midterm 60 minutes, Final 120 minutes.
 - Send out problems 00:00 (PST). Allocate a contiguous 60 (or 120) interval, answer questions. Upload your answers by 23:59 (PST).
- HW 50%, Midterm 15-20%, Final 30-35%



Practicing with Zoom!



- Everyone is muted by default!
- Feel free to share your video
- **Questions:** type your question in Chat
- **Videos:** Recorded and can be access in Canvas (zoom tab)
- **Zoom Breakouts:** Small groups to work on in-class exercises

An In-class Exercise (1)

Prove that for any $n \geq 1$, the set of integers $\{1, \dots, n\}$ has exactly 2^n many subsets.

For example, $\{1,2\}$ has 4 subsets: $\emptyset, \{1\}, \{2\}, \{1,2\}$

An In-class Exercise (2)

Prove that every amount of postage of 12 cents or more can be formed using just 4-cents and 5-cents stamps.

For example $12=4+4+4$.