

Data Structure

CS 284 C

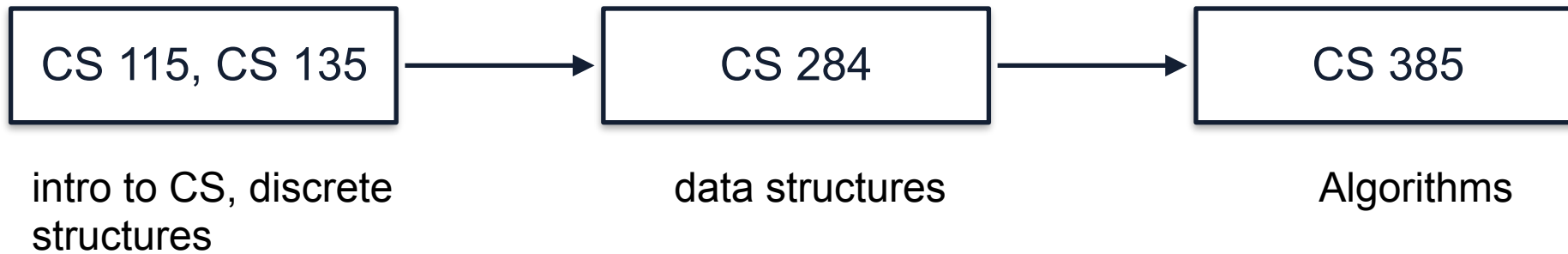
Instructor: Susan Liu

xueqing.liu@stevens.edu

Welcome to CS284

- **Instructor:** Susan (Xueqing) Liu
- **Email:** xliu127@stevens.edu
- **CAs:**
 - Revathy Ramasundaram rramasun@stevens.edu
 - Joshua N. Schmidt jschmid3@stevens.edu
 - Bhagyesh Patel bpatel91@stevens.edu

What is Data Structure?



- How many have taken CS 115? CS 135?
- Familiar with Python?
- Familiar with Java?

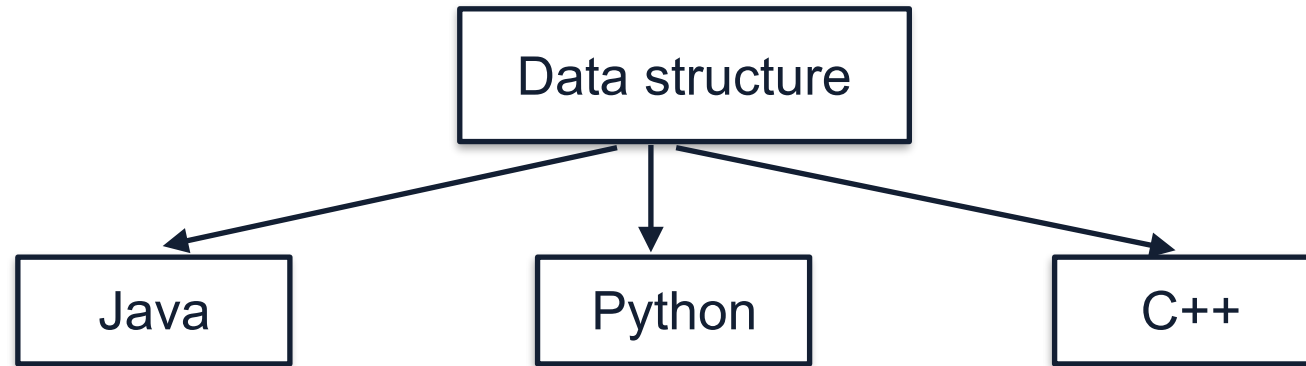
What is Data Structure?

- Data structures are ways to **organize** information in a computer memory, making it efficient to **store**, **update** and **retrieve** information
- By the end of this semester, you will
 - Have a general understanding on data structure, OOP, algorithm efficiency
 - Solve many LeetCode - **Medium** and some LeetCode - **Hard** problems

Overview of CS 284

- Java basic
- Abstract data type
- Object-oriented programming
- Software life cycle
- Algorithm complexity
- big-O notation
- Collections, list, stack, queue
- Trees
- Sets and Maps
- ...

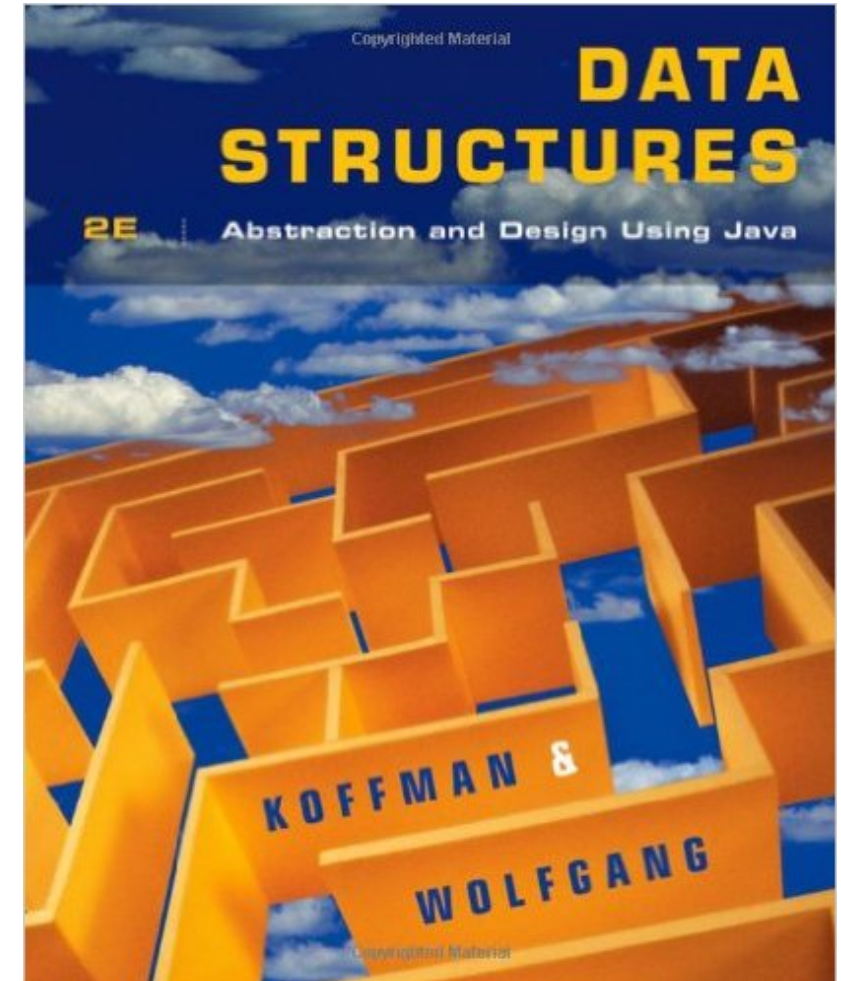
Learning Data Structure **using** Java



- Advantage using Java
 - Popular for building industry systems, e.g., Android
 - Good teaching example for object-oriented programming

Textbook

- Data structures, Koffman and Wolfgang 2010
- http://www.r-5.org/files/books/computers/algo-list/test-dev/Elliot_B_Koffman_Paul_A_T_Wolfgang-Data_Structures-EN.pdf



Questions



- Susan's office hour: 1:30 - 3:30 Wed (starting Jan 29)
- CAs' office hours:
 - Joshua: Mon 1-2
- Office hours > **Piazza** > email
- Send email in emergency

Stevens Institute of Technology

(change school)

Are you a professor?
Click here to create & join

classes

Selected Term: Spring 2020

Spring 2020

Class 1: CS 284 C: Data Structures (edit)

Instructors: Susan Liu · 1 Enrolled

✓ Join as: ☒ Student ☐ TA ☐ Professor

Final Grade Calculator

- Homework (30%)
- In-class quiz (10%)
- Midterm (20%)
- Endterm (20%)
- Final (20%)

Homework

- 5 HWs, 1st HW due on Feb 12 11:59pm
- **Late policy:**
 - < 24 hours - 90%, < 48 hours - 70%, > 48 hours - 0 point
 - Sick/Emergency - email
- Mostly coding problems
 - 0 point if not compile
 - 0 point if plagiarism is detected

In-class Exercises

- 7-8 in-class exercises
- 0 if absent

Exams and Recitations

- Three exams
 - Midterm - first half semester (Week 8)
 - Endterm - second half semester (Week 15)
 - Final - entire semester (Week 16)
- Recitations
 - Every Wednesday
 - Taught by CAs