CS 261: Data Structures

Class Overview

Class Information

- Instructor: Sinisa Todorovic
 - [pronounced: SINISHA]
 - http://web.engr.oregonstate.edu/~sinisa/
 - sinisa@oregonstate.edu
- Office: KEC 2107
- Office Hours: W 2-3, or by appointment

GTAs

- Nasrin Abdolahi <abdolahn@oregonstate.edu>
 - Office Hours: Thur 11-11:30am
- Guarav Sharma <sharmgau@oregonstate.edu>
 - Office Hours: Thur 11:30-12pm
- Dan Taylor <taylord2@oregonstate.edu>
 - Recitations: Tue, Thur
 - Office Hours: Thur 12-12:30

About me...

• Ph.D. at University of Florida



 Postdoc at University of Illinois Urbana-Champaign (UIUC)

• Joined OSU in 2008



Teaching: CS 261



Teaching: ECE 468



Digital Image Processing

Teaching: CS 556

Computer Vision



This Course

- Lectures:
 - MWF 1-1:50, GILB 224
- Recitations:
 - Tue 11-11:50, KEC 1003
 - Tue 12-12:50, KEC 1003
 - Tue 1-1:50, GBAD 103
 - Thu 9-9:50, KEC 1003

Attendance is recommended, not mandatory

Attend the recitation you registered for!

How to Contact Me

- Email: sinisa@oregonstate.edu
- Subject should contain: "CS261"
- If you do not have CS261 in your subject, I cannot guarantee a timely response.
- For HW questions, use Canvas

If You Want to Talk to Me

- I'd be very glad to talk to you,
 - During office hours, or
 - By appointment (scheduled via email)
- But will not be available at other times

Class Description

- Textbook: Dr. Budd's Online Textbook
- Chapters can be downloaded from Canvas

• "C Pocket Reference" by Peter Prinz and Ulla Kirch-Prinz

- http://oreilly.com/catalog/9780596004361/
- http://www.amazon.com/C-Pocket-Reference-Peter-Prinz/dp/0596004362

Class Objectives

- 1. General-purpose data structures and algorithms for:
 - 1. Dynamic arrays,
 - 2. Linked lists,
 - 3. Stacks, Bags, Queues, Deques
 - 4. Trees, BSTs, ADLs
 - 5. Heaps
 - 6. Graphs
 - 7. Hash tables
- 2. Software implementation in C

Office Hours

- Aimed at additional clarifications and guidelines -- not for doing your homework.
- GTAs will not be able to look for syntax errors and help you compile your C code.
- Ask concrete, detailed questions!

Grading Distribution

- 7% -- Homework 1 (max 100 points)
- 7% -- Homework 2 (max 100 points)
- 7% -- Homework 3 (max 100 points)
- 9% -- Homework 4 (max 100 points)
- 20% -- Midterm Exam 1 (max 100 points)
- 20% -- Midterm Exam 2 (max 100 points)
- 30% -- Final Exam (max 100 points)

Total: S = 0.07*(H1+H2+H3) + 0.09*H4 + 0.2*(E1+E2) + 0.3*FEMax total = 100

Grading Policy

Total score S	Final Grade
>90	А
>85	A-
>80	B+
>76	В
>72	B-
>68	C+
>64	С
>61	C-

Homework

- Programming assignments submitted via **Canvas** by the **deadline**
- We will grade ONLY homework submitted via Canvas
- No credit for homework on your personal computers, USB drives, e-mails, etc.,
- Even when you can prove that it has been done before the deadline

Late Homework

- Full credit only with a prior approval or in the case of emergency
- A request for the approval must be emailed to the instructor at least two days before the deadline.
- Penalized by 20% for each day after the deadline.

Homework: Compiling Errors

- Make sure that your code compiles with our Makefile on the School's server
- **Partial credit** for compiling errors, same as late homework
- A GTA will let you know if you had a compiling error within 24 hours of the submission deadline.

Mistakes in Submitting Homework

Students quite often accidentally submit wrong files

• Check carefully the files you submit!

Collaboration

- You are expected to do your own work!
- OK to talk about **general** approaches and strategies with other students
- Do not simply let someone else tell you how to solve the problem
- Do not let someone else copy your work

Academic Honesty -- Homework

- Not Ok
 - Sharing code, solutions
 - Using code that is not yours, e.g., from Internet

- Very similar homeworks
 - Common excuse: "We worked on it together"
 - All involved students will get zero credit

Help on Assignments

Convas discussions

• See us during our office hours

Start working on your assignments early!

Exams

• 2 midterm exams and Final Exam

• The exams are closed book

- Dates:
 - Monday, May 7, 1-1:50, in GILB 224
 - Friday, June 1, 1-1:50, in GILB 224
 - Monday, June 11, 12-1:30, in GILB 224

Makeup Policy for the Exams

- Makeup only for the midterm exams; No makeup for the final exam
- A makeup exam will be offered within 1 week after the scheduled midterm exam
- For students who had an emergency or got my approval. Contact me **at least two days** before the midterm for the approval