



University of Pittsburgh

CS 1632 Introduction

Instructor Introduction

Course Introduction

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School of Computing and Information





Instructor Introduction



My Technical Background

■ Wonsun Ahn

- First name is pronounced *one-sun* (if you can manage)
- Or you can just call me Dr. Ahn (rhymes with *naan*)

■ PhD in CPU Design and Compilers

- University of Illinois at Urbana Champaign

■ Industry Experience

- Software engineer, field engineer, technical lead, manager
- Bluebird Corporation (70-person startup company)
 - Manufactures industrial hand-held devices from top to bottom
 - Me: Built software stack based on Windows Embedded
- IBM Research (thousands of people)
 - Does next-gen stuff like carbon nanotubes, quantum computers
 - Me: Designed supercomputers for ease of parallel programming



My World View

- Everything is connected
 - Pandemic: If my neighbors catch the virus, so will I
 - Environment: If my neighbors pollute, I will feel the effects
 - Economy: Think of how the subprime mortgage crisis spread
- Zero-sum thinking (old way of thinking)
 - “If you get a larger slice of the pie, I get a smaller slice.”
 - Therefore, if you lose, I win (and vice versa)
- Zero-sum thinking no longer works
 - If you catch the virus, do I become safer from the virus?
- Collaboration is replacing competition



Collaboration is Replacing Competition

- Is happening in all spheres of life
- Collaboration is also happening in the IT industry
 - The *open source* movement
 - Increasing importance of the software/hardware *ecosystem*
 - Increasing importance of the developer *community*
- Collaboration is also important for learning
 - During my undergrad years, what do I remember best?
 - Stuff that my classmates taught me
 - Stuff that I explained to my classmates



Supporting Collaborative Learning

- I *never* grade on a curve
 - You will not be competing against your classmates
 - You are graded on your own work on an absolute scale
- You will be working with a partner (on GitHub)
- You will be a member of a Team
 - You are already a member of the class on Microsoft Teams
 - I encourage you to be on Teams at most times (I will too)
 - You can install app on both laptop and cell phone
 - If you have a question, you can ask in the Team “Posts” tab
 - Either your classmate or your instructor will answer
 - You can chat with any individual on the Team
 - “Manage Team” item in the “...” Team context menu



Supporting Collaborative Learning

- You will be a member of a Group
 - On Teams, you are part of a chat group of 8~9 members
 - Members are a good mix of in-person and online students
 - Your instructor is also a member of each Group
 - It is a smaller support group where you can talk more freely

- There will be many unscored exercises
 - You still need to submit them, but the scores won't matter
 - You are encouraged to share each other's work and learn



Course Introduction



Structure of the Course

- (20% of grade) Two Midterms
- (70% of grade) Five projects
 - Manual Testing and Traceability Matrix
 - Unit Testing
 - Systems Testing a Web Application
 - Performance Testing
 - Comprehensive static & dynamic testing
- (10% of grade) Participation
 - TopHat lecture questions, exercise submissions, Teams participation
- Class resources:
 - Canvas: announcements, Zoom meetings, recorded lectures
 - GitHub: syllabus, textbook PDF, lectures, exercises, deliverables
 - Tophat: online lecture questions
 - GradeScope: exercise / deliverable submission, grading and feedback
 - Microsoft Teams: Online / off-line communication



For More Details

- Please refer to the course info page:
https://github.com/wonsunahn/CS1632_Fall2020/blob/master/course-info.md
- Please follow the course schedule syllabus:
https://github.com/wonsunahn/CS1632_Fall2020/blob/master/syllabus.md

TODO



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- Submit the TopHat survey questions (due 8/21)
- Submit the Java assessment exercise (due 8/28):
 - https://github.com/wonsunahn/CS1632_Fall2020/tree/master/exercises/0
 - Submit to GradeScope
- Submit the partnership contract (due 8/28):
 - https://github.com/wonsunahn/CS1632_Fall2020/blob/master/partnership_contract.txt
 - Submit to GradeScope



Brainstorming

- Please go to your respective Teams chat groups
 - But stay in the Zoom room and use only chat on Teams
 - To have chat content accessible to asynchronous students
- 1. Get to know each other; introduce yourselves
- 2. And then try to answer the following questions:
 - What do you think software quality assurance is?
 - What software quality assurance techniques have you employed during your career?
 - What software quality assurance techniques do you wish to learn through this course?
- 3. Around 9:45, we will share discussions with class