Administrivia

CS 4411/5411: Operating Systems Practicum
Spring 2023
Robbert van Renesse / Yunhao Zhang



Inclusion

- We strive to make CS4411/5411 a welcoming, safe, equitable, and respectful environment, consistent with Cornell's commitments
- We recognize that the society we live in is none of those things, that we have implicit biases, and that we have to work hard every day to counter those biases to create an inclusive environment
- If you witness a bias incident or have been the victim of one, please file a <u>confidential report</u> with Cornell
- If you have any suggestions such as improvements to the web site, syllabi, slides, homework and exam questions, and so on, you can email cs4411-prof@cornell.edu

Emotional Help

Cornell Health	https://health.cornell.edu/servi ces/mental-health-care	Cornell University Health Service
Student Disability Services	sds.cornell.edu	Ensures that all aspects of student life are accessible, equitable, and inclusive of those with disabilities. Send accommodation letters to Veronica VanCleave-Seeley (vv48, Gates 401) by Sep 15.

Get help. Get documentation. The earlier the better. Also, please look out for each other

How this class is organized

- Who's Who
- Before you take this class...
- Communication
 - Lectures, OHs, FAQ, etc.
 - Getting Help
- Homework, exams

About RVR

- Ph.D. C.S., Vrije Universiteit Amsterdam
 - Amoeba Distributed Operating System
- Industry: Research Scientist @ AT&T Bell Labs
 - Unix, Plan 9
- Serial entrepreneur
 - Reliable Network Solutions (IP → Amazon)
 - D.A.G. Labs (acquired by FAST, then by Microsoft)
 - Exotanium (ongoing)

Interests: scalable and fault tolerant distributed systems

Non-geek: musician (trad. jazz), swing dance, unicycling

About Yunhao

- I'm a 6th year PhD candidate advised by Lorenzo Alvisi
- This is my 8th semester teaching 4411
 - instructor: spring'19, fall'20, spring'22, spring'23
 - teaching assistant: fall'18, spring'20, spring'21
- I wish to bring the fun of playing with OS to all of you
- My homepage is <u>dolobyte.net</u>

(Great) Teaching Assistants

Yu-Ju Huang

Xinwen Wang

Benton Li

Liam Arzola

Oliver Matte

Vinh Nguyen

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Prerequisites

You should either have taken
 CS4410/5410 or take it concurrently

Otherwise: you must contact an instructor, explain your situation and request permission

Course Content

- This is a project course
 - Lectures/discussions on Friday afternoon
 - 6 (CS4411) or 7 (CS5411) projects in C
 - queue
 - multi-threading and synchronization
 - multi-level feedback scheduler
 - RISC-V project
 - make, testing, ...
 - file system cache
 - file system
 - No exams, no textbook

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- Grades & Policies

Communications

- Website
- Office Hours
- CMSX
- Ed Discussion
- Email

Course Web Page

http://www.cs.cornell.edu/courses/cs4411/

- Schedule
- Project release and due dates

CMSX

https://cmsx.cs.cornell.edu

- Assignments
- Grades & Regrades

Office Hours

See web pages

Email

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For time-sensitive matters, email <a href="mailto:cs4411-staff@cornell.edu">cs4411-staff@cornell.edu</a>
  (goes to course staff)

For sensitive-matters, email <a href="mailto:cs4411-prof@cornell.edu">cs4411-prof@cornell.edu</a>
  (goes only to prof)
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Project Teams

- Each project (except the first) must be done in teams of 2 to 3 students
 - You can select your own team
 - Or you can let us do it
 - Aim to have this done by next Friday
 - queue project must be done individually
 - we can spend a little time after class trying to do the matching

Team Code of Conduct

- Each student should feel safe, welcome, respected
- Participate, but don't dominate
- Be patient
- Respect diverse talents and ways of learning
- Fight your implicit biases

A well-run team benefits all participants

Learning Strategies Center



Find Study Partners!

Studying with peers is a great way to connect with other Cornell students and is a powerful tool for learning.

Cornell's Learning Strategies Center (<u>LSC</u>) helps match you with study partners.

To learn more, visit the LSC's <u>Studying</u> <u>Together webpage</u> or scan the code →



http://lsc.cornell.edu/ studying-together/

lsc.cornell.edu



Academic Integrity & Honor Code

All submitted work must be your own

- OK to discuss concepts with any other student
- Teams are not allowed to share code
- One submission per team
- Put your code in a private repo
 - recommend: github.coecis.cornell.edu

Violations will be prosecuted

Academic Integrity

Why not cheat?

- It hurts you in various ways:
 - It reduces the value of your Cornell degree
 - It stresses you out because you might get caught
 - You won't feel good about yourself afterward
 - The energy that goes into cheating is better used for learning
- It hurts other students:
 - It stresses them out
 - By far most students are honest

If you need help, get it early

Grading

- No "curving"
 - CS4411 is not a competition
 - Your grade reflects your learning objectives, not how well you did compared to others
 - Goal is to give everyone an A
- Grade is weighted average of projects
 - Weighing of projects TBD