

Ethics in CS

Impact of CS on Society

Review for the Final Exam

CS 64: Computer Organization and Design Logic
Lecture #19
Winter 2019

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Administrative

- The Last 3 Weeks of CS 64:

Date	L #	Topic	Lab	Lab Due
2/26	14	Combinatorial Logic, Sequential Logic 1	7 (CL+SL)	Wed. 3/6
2/28	15	Sequential Logic 2		
3/5	16	FSM 1	8 (FSM)	Wed. 3/13
3/7	17	FSM 2		
3/12	18	Digital Logic Review	9 (Ethics)	Fri. 3/15
3/14	19	CS Ethics & Impact Final Exam Review		

FINAL IS COMING!



- **Thursday, 3/21** in this classroom
- Starts at **4:00 PM **SHARP****
- Please start arriving 10 minutes early
- Please bring your UCSB IDs with you
- **Closed book**: no calculators, no phones, no computers

STUDY GUIDE
NOW ONLINE!

What's on the Final

- Everything

Ethics

- Moral principles that govern a person's behavior
- Attempts to answer questions like:
“What is the best way people to do something?”
“What actions are right or wrong”
- In CS, it's not just about the obvious questions, like:
“Is it ok to copy someone else's code and use it?” NO
“Can I take this mouse pad from work?” NO
“I mean, come oooooon, it's just a mouse pad...” **NO!!!**

Ethical Considerations in CS

- Our work in CS affects people (why do it otherwise?!)
 - Ourselves
 - Our work colleagues
 - Our professional community
 - Society at large

Ethics in CS notes the following:

- Our activities and choices affect other people in significant ways
- We have principles and guidelines that guide ethical action

Ethical Considerations in CS

- Act consistently with the **public interest**, your **clients**, your **employer**, your **colleagues**.
- Make your products/services meet the **highest professional standards** possible.
- Maintain **integrity** in your work. Maintain a good reputation for yourself and your profession
- If you're a manager, **promote an ethical approach** to your work and your team's work.
- Keep **bettering yourself** through education

Who Cares if you Aren't Ethical?

- Everyone does – it's a “***social contract***”
- If you are not ethical, ***at best the following can happen...***
 - ... your job will be at risk
 - ... your relationship with others will be at risk
 - ... you are likely to be negatively labeled as “unethical” in your professional circle
 - ... you will give “a bad name” to yourself, your company/employer, and to the field of CS in general
- ***At worst***, you will have **major** financial/legal ramifications
 - Get fired (and possibly blacklisted)
 - Get sued
 - Get arrested

Professional Guidelines

- The IEEECS/ACM Joint Task Force on Software Engineering Ethics and Professional Practices

“Code of Ethics and Professional Practice”

Purpose:

- Documents the ethical and professional obligations of software engineers.
- Instructs us about the standards society expects CS professionals to meet.
- What to expect of one another.

Code of Ethics and Professional Practice

Lab 9 – Task 1

- Read the IEEE Computer Society's article
- Then read a collection of case studies on ethics
 - Both in the lab description
- Afterwards, go to an online form.
You will choose which *clauses* from the code of ethics are more relevant to each case study.
 - Link in the lab description

The Impact of CS in the World

- What do YOU think Computer Science's impact in the world today is?...

The Impact of CS in the World

- Today – more than ever before – CS enables us to make tools that help people:
 - Connect
 - Visualize information
 - Understand the impacts of environmental, economic, energy happenings
 - Collaborate and work together

Google Talk at CSIT Conference

Lab 9 – Task 2

- View video of Megan Smith’s talk at the 2010 Computer Science & Information Technology (CSIT) Conference about the Impact of CS Worldwide
 - Smith was a VP at Google and then the “U.S. CTO” and Assistant to President Obama
 - Link is in the lab description
- Afterwards, go to an online form. You will identify the impact of CS in a variety of areas.
 - Link is... ahhh... you know where...

YOUR TO-DOs

- Lab 9
 - Online assignment – due Sunday by 11:59 PM

</LECTURE>