

SENG401:

Social & Professional Issues

An overview of this term's course.

Instructor

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- Lectures: A01/A02 MR 1:00 – 2:20pm ECS 104
- Office Hours: WF 10:30 – 12:00 in ECS 516
- Open door in ECS 516

Overview: CSC 105 Activities

- **Term Project – 25%**
- **Midterms – 3 for 55%:**
 - **Midterm 1 is on Thur, Jan 29, 20%**
 - **Midterm 2 is on Thur, Mar 5, 20%**
 - **Midterm 3 is on Thur, Apr 2, 15%**
- **Participation – 20% (Web Blogs)**

JANUARY 2015

Computer Science

S	M	T	W	T	F	S
				1	2	3
4 WEEK 1	5 <i>Second term classes begin</i>	6	7	8	9	10
11 WEEK 2	12	13	14	15	16	17
18 WEEK 3 <i>Last day for 100% reduction of tuition fees for second term courses</i>	19	20	21 <i>Last day for adding courses that begin in second term</i>	22	23	24
25 WEEK 5	26	27	28	29 Midterm 1	30	31 <i>Last day for paying second term fees</i>



FEBRUARY 2015

Computer Science

S	M	T	W	T	F	S
1 WEEK 5	2	3	4	5	6	7
8 <i>Last day for 50% reduction of tuition fees for courses</i>	10 <i>Family Day [UVic closed]</i>	11 Reading Break	12 Reading Break	12 Reading Break	13 Reading Break	14
15 WEEK 6	16	17	18	19	20	21
22 WEEK 7	23	24	25	26	27	28 <i>Last day to withdraw</i>

MARCH 2015

Computer Science

S	M	T	W	T	F	S
1 WEEK 8	2	3	4	5 Midterm 2	6	7
8 WEEK 9	9	10	11	12	13	14
15 WEEK 10	16	17	18	19	20	21
22 WEEK 11	23	24	25	26	27	28
29 WEEK 12	30	31				



APRIL 2015

Computer Science

S	M	T	W	T	F	S
WEEK 13			1	2 <i>Last day of classes for second term courses</i> Midterm 3	3	4
5	6	7 <i>Exams begin for second term courses</i>	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22 <i>Exams end for second term courses</i>	23	24	25
26	27	28	29	30		

Themes

- Old Problems in a New Context
- Adapting to New Technology
- Global Reach of the Net
- Trade-offs and Controversy
- Differences between Personal Choices, Business Policies, and Law
- Negative and Positive Rights, or Liberties and Claim-Rights

Course Topics

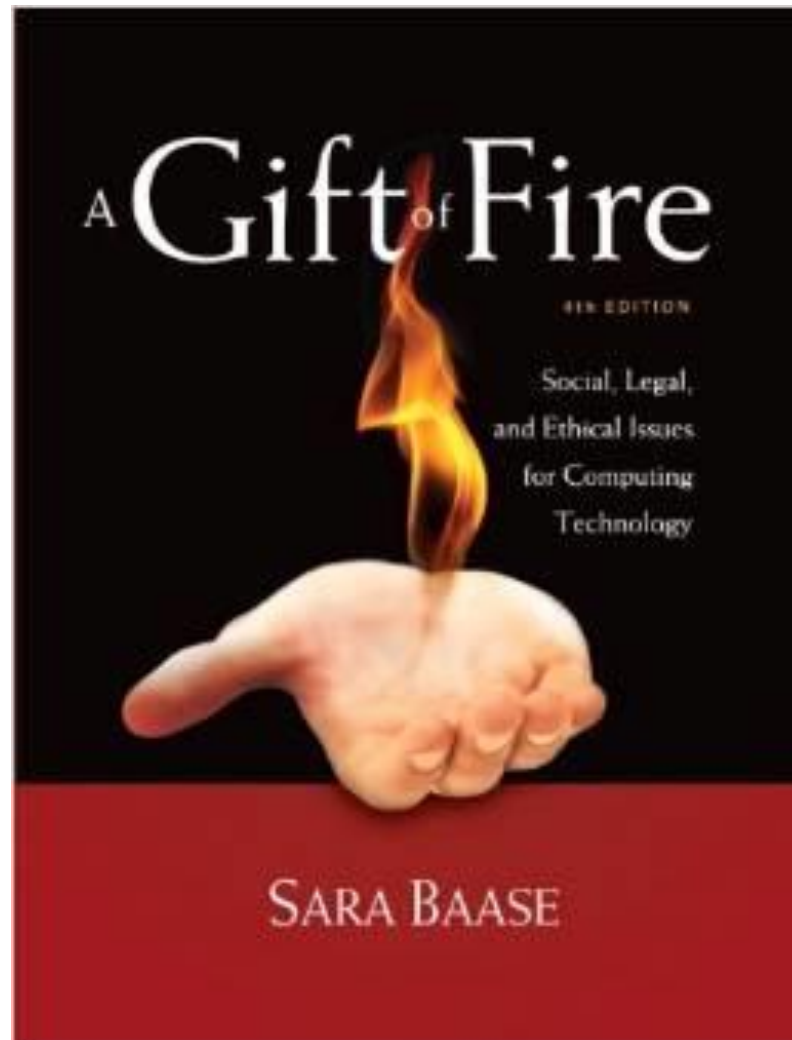
1. Computer Technology and its Benefits
2. Whither Privacy?
3. Eavesdropping
4. Trusting Computers
5. Free Speech
6. Intellectual Property (IP)
7. Crime
8. Work
9. Play
10. Professional Ethics
11. Environment



1. Computer Technology & its Benefits

- What benefits has computer technology brought about in the past ten years?
 - From a direct & personal perspective?
 - From a broader, societal perspective?
- Is it an enabler?
- Or is it a destroyer?
- “Prometheus”?

Prometheus



2. Whither Privacy?

- Risks of Computer Technology to Personal and Private Data
- “Big Brother”?
- Consumer Information (databases, marketing)
- Social Insurance Numbers, IDs, Health Information
- Protecting Privacy

2. Whither Privacy?

Are businesses that provide free Internet services or PCs in exchange for tracking Web activity offering a fair option for consumers, or are they unfairly taking advantage of low-income people who must give up some privacy for these services?



3. Eavesdropping

- Encryption and Interception of Communications
- Wiretapping? Designing this into systems?
- Cryptography
- Encryption Policy
 - export controls; domestic controls
- Fundamental Issues
 - Role of Secrecy
 - Status-Quo?
 - Trust in Government

4. Trusting Computers

- What can go wrong?
 - as a computer user?
 - as a computer professional?
 - as an educated member of society?
- Problems for individuals; system failures; abandoned systems
- Therac-25
- Increasing Reliability and Safety
- Perspective
- Computer models and trust
- What we can learn from other disciplines

4. Trusting Computers

How many of you have tried hang-gliding? Or bungee-jumping? How many of you would say “No way!”? How many would ride on a computer-controlled train that had no human driver? How many of you would like to be one of the first to have a computer chip implanted in your head to, say, improve language ability?



5. Free Speech

- What is the web?
 - Print media?
 - Broadcast media?
 - Common carrier?
- Offensive Speech and Censorship
- Internet Access in Libraries and Schools
- Bombmaking?
- “On the Internet, nobody knows you’re a dog.”
- Spam
- Diversity

5. Free Speech

Should spam be considered a form of trespassing? Restaurants are open to the public but can exclude rowdy people. What rules or laws does that analogy suggest about sending spam to subscribers of an ISP? Are free-speech laws more relevant in one case than in another?



6. IP

- Intellectual Property and Changing Technology
- Copyright Law
- Fair dealing?
- Copying music, movies, software, books
- Canadian copyright reform
- Software piracy
- Free-speech issues
- Free software

6. IP

Should algorithms be patentable?



7. Crime

- Computers + the web: new environment for fraud
- Hacking: which definition?
- Script kiddies
- Hacktivism?
- Scams, phishing
- Credit cards, identity theft, cell phones

7. Crime

Do hackers provide a public service by finding and publicizing computer-security weaknesses?

8. Work

- Job destruction and creation
- Are we earning less? Or are we purchasing more?
- Changing skills and jobs
- Work environment
- Employee Monitoring
- Employee e-mail, web surfing, voice mail
- Health Issues
- "Off-shore" programmers

9. Play

- Computer games
- MMORPG
- Messaging
- Social Networking
- Twitter

10. Professional Ethics

- “Computer Ethics”
- Ethics (briefly!), ethical views
- IEEE/ACM Codes
- Case Studies

11. Environment

- ICT Impact on Environment
- Optimistic vs. Pessimistic Assessments
- Direct and Indirect effects
- Structural and Behavioral effects

Sony hackers may still have access to computer systems

News report says investigators are unable to confirm eradication of those responsible for cyber-attack linked to The Interview

Sarah Butler

Friday 2 January 2015 09:30 GMT



< Shares
240

Comments
89



A computer screen showing The Interview available for download. Photograph: Richard Vogel/AP

Sony Entertainment is unable to confirm that hackers have been eradicated from its computer systems more than a month after the film studio was hit by a debilitating cyber-attack, a report says.

The chief executive, Michael Lynton, has described how the company came up with an old-style communications system based on a “phone tree” to relay updates on the hack from person to person. An old cache of BlackBerrys was also brought into action because the phones receive email via their own servers.

“It took me 24 or 36 hours to fully understand that this was not something we were going to be able to recover from in the next week or two,” Lynton told the

Computer glitch prevents US' most advanced F-35 fighter jet from firing until 2019 – report

Published time: January 01, 2015 20:50

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Reuters / U.S. Air Force / Staff Sgt. Joely Santiago / Handout



The Pentagon's fighter jet F-35 may not be fully operational until 2019 due to a newly discovered computer glitch. The \$400 billion ultra-sophisticated jet, the most expensive in US history, was expected to enter service in 2015.

Tags

[Air Force](#), [Arms](#), [Army](#), [Planes](#), [USA](#), [Vehicles](#)

F-35 is the fifth generation combat aircraft which is designed in three variations for US Air Force, Navy and Marines to replace out of date aircraft. It was planned to join the Marines in 2015 and Air Force in 2016.

It is planned to replace the Air Force's A-10 Warthog ground attack plane and Lockheed F-16 multirole fighter, the Navy instead of Boeing F/A-18 Hornet carrier-based fighter, and the Marines instead of Boeing AV-8B Harrier II jump-jet.

However, the most awaited plane's main weapon will not be able to fire due to a computer glitch. The

Google: Your Computer Is Stupid

Google says intelligent machines are distant technology, while other researchers map out robot ethics.



Much like humans, robots have difficulties recognizing the nuances of speech, behavior and thought.

By Tom Risen

Jan. 1, 2015 | 12:01 a.m. EST



Artificial intelligence raises many hopes, fears and questions about what it means to be human in a society where robots are an increasing part of the workforce and [could replace thousands of jobs](#). Sentient machines that can outthink humans are far beyond current technology, however, and could remain the stuff of science fiction for centuries, engineers say.

Scientists have made huge leaps designing machines that can respond to human behavior, but "the development of full artificial intelligence could spell the end of the human race," Stephen Hawking, a