

Professional Ethics for Computer Science

Lecture 1: Motivation and Basics

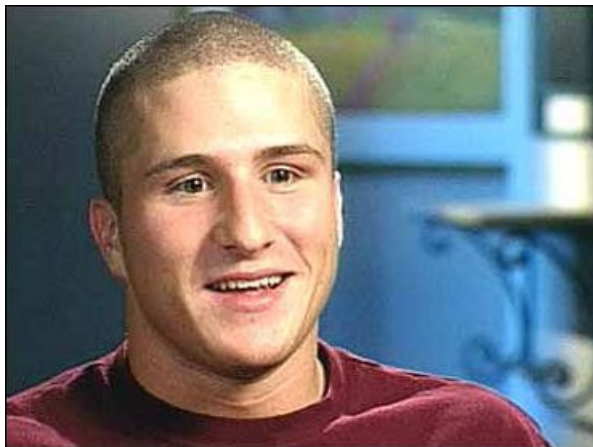
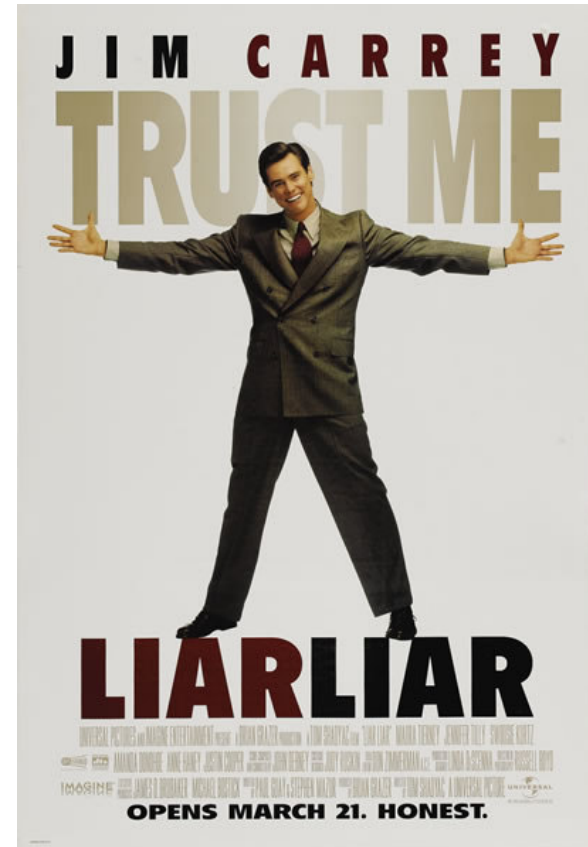
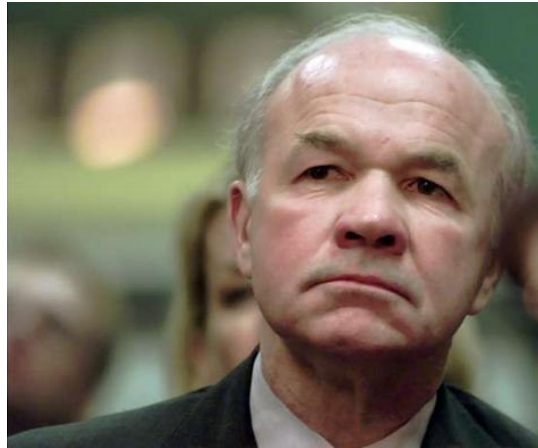
Jie Gao

Computer Science Department

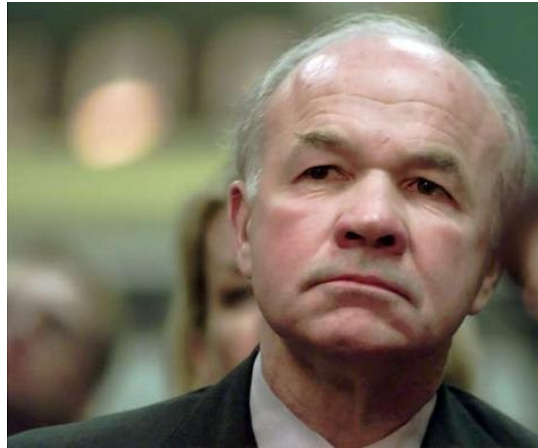
Stony Brook University

Acknowledgement: the slides are based on inputs from Klaus Mueller.

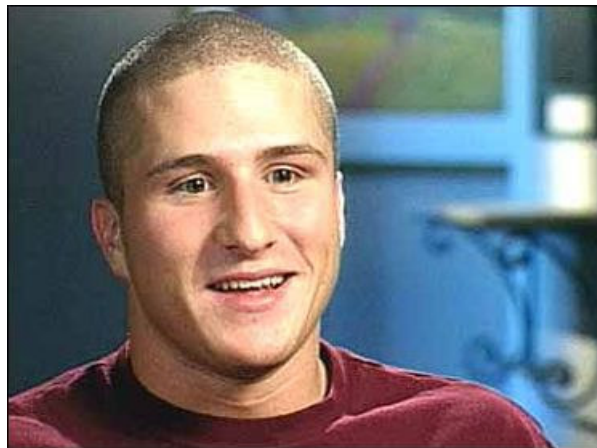
Can You Name These Guys?



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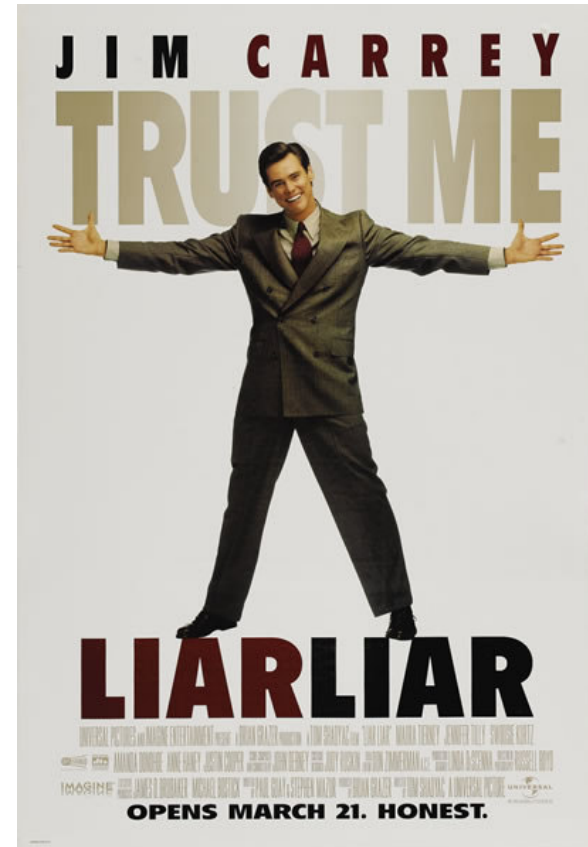
Ken Lay (Enron)



Shawn Fanning
(Napster)

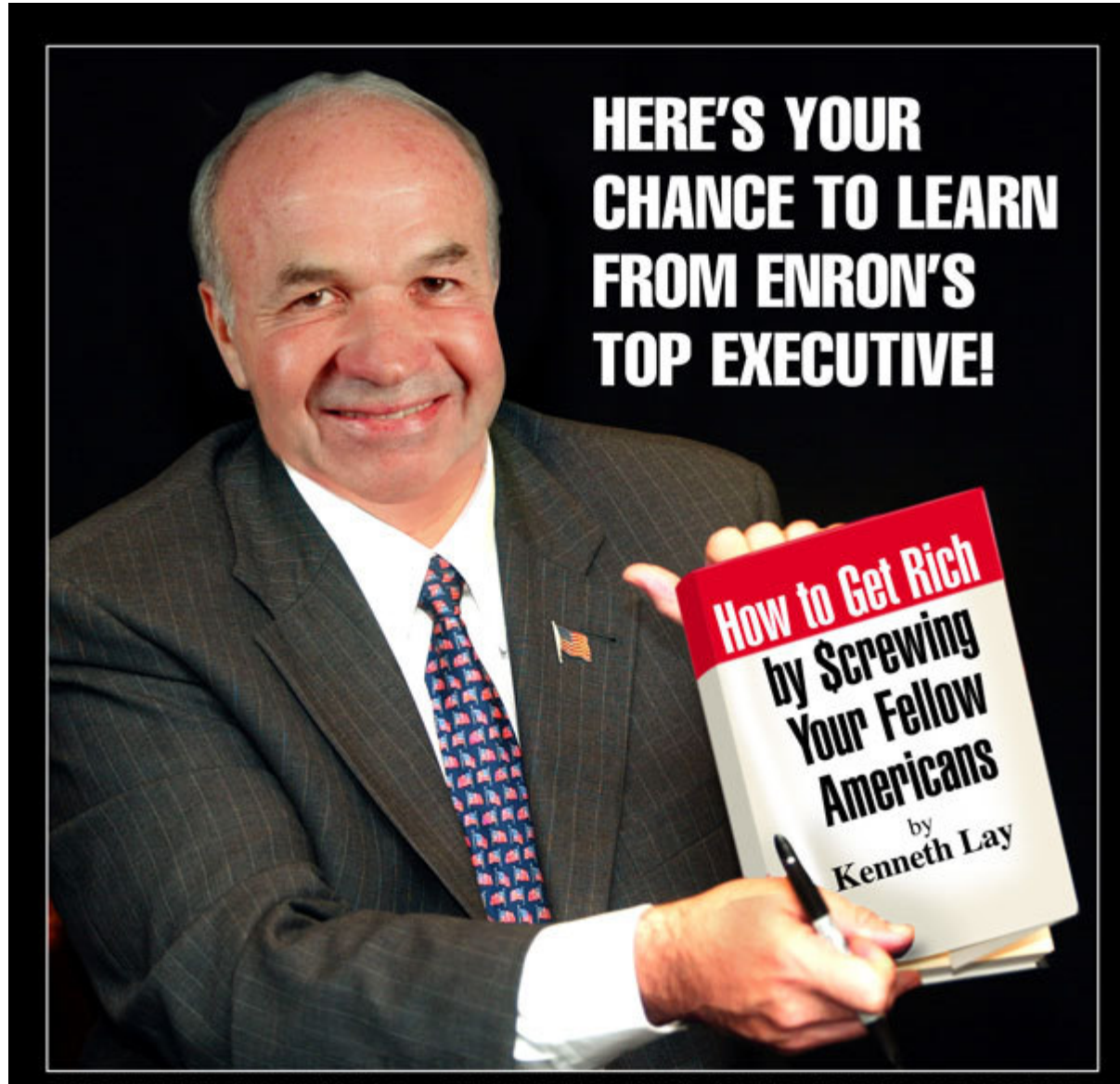


Pinocchio (Literature)

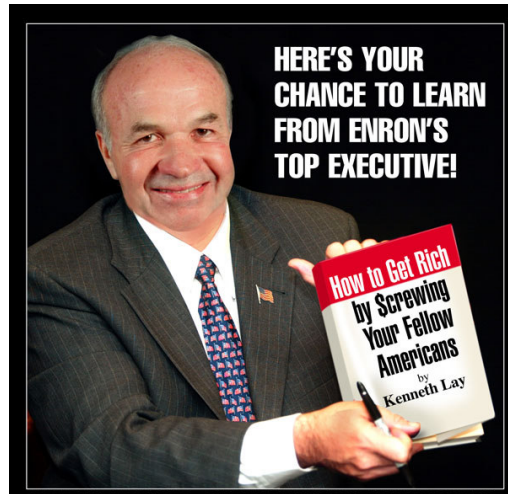


Jim Carrey
in movie "liar liar"

What This Course Is NOT About:



What This Course Is NOT About:



HAVE YOU EVER WANTED TO BE RICH BEYOND YOUR WILDEST DREAMS?

I'm Kenneth Lay, and I'm here to tell you that the Tony Robbinses and Oprahs of this world are full of crap. They will tell you that the keys to success are goal-setting, affirmations, walking on hot coals, meditating or finding your inner child. Bullshit! If you really want to get rich, there are only three skills you need: lying, stealing and cheating! And I'll teach you how in my new book!

First, you'll learn how to buy off politicians from Bush to Cheney, who will push your deregulation plan so you can manipulate the California energy market and rake in millions! Then I'll show you step-by-step how to cook the corporate books, bamboozle your investors, hide your debt and cash in your stock just before the whole thing goes to hell! Sound too good to be true? Just read the chapter in my book entitled "What to Do if the Feds Come After You." Learn all the tricks of pleading the Fifth while your co-workers get indicted! If creditors try to sue you, follow my tips on how to evade them by socking away millions in annuities in the state of Texas, where the losers can't touch it!

While the suckers of this world cry about losing their retirement funds, you can live it up on their hard-earned cash! To learn more about being a white-collar scumbag with no soul, or paper trail—buy my new book today! Remember, if you ain't lyin', then you ain't tryin'!

Ad parody. Not a real ad. No such book exists. Crooked CEO's head stripped onto our model's body. We doubt that Kenneth Lay would be any more forthcoming in a book than he was with the senators at the Enron hearings. As of this writing, Kenneth Lay has not yet been indicted.

What This Course IS REALLY About

Ethics in general:

- the set of beliefs about *right and wrong* behavior

Ethics in business:

- is becoming more important because the *risks associated with inappropriate behaviour have grown* in number, complexity, likelihood and significance
- corporations want to protect themselves and their employees from *legal action*

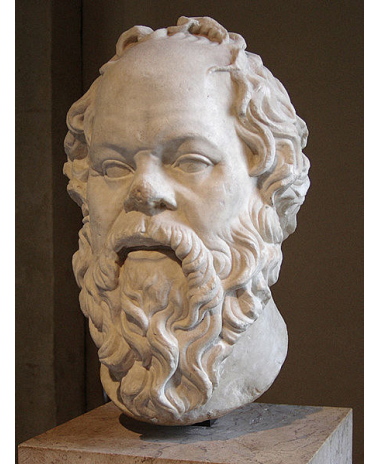
Ethics in information technology:

- email and Internet access *monitoring* by employers
- peer-to-peer networks used for music downloads implies *violation of copyright laws*
- unsolicited e-mail (*spam*)
- hackers breaking into databases of financial institutions can result in *identify theft*
- students downloading material from the web can result in *plagiarism* on term papers
- web sites plant cookies or spyware on visitors' hard drives to *track their Internet activity*

What IS Ethics?

According to Socrates (Greek philosopher, 477 - 399 BC):

- knowledge having a bearing on human life is highest
- self-awareness is necessary for success
- self-ignorance will cause difficulties in life
- people will naturally do what is good, if they know what is right
- evil or bad actions are the result of ignorance.
- so, if a criminal were truly aware of the mental and spiritual consequences of his actions, he would neither commit nor even consider committing them
- therefore, any person who knows what is truly right will automatically do it



Ethics In Practice (Applied Ethics)

Ethics is founded in a society's *moral code*

- the rules (conventions) by which a society lives (an established consensus)
- but there are conflicts...

Moral code depends on personal background

- age group, ethnic and cultural background, religion, gender,...
- example: "Should I put Grandma into a retirement home?"
- example: "Should I buy/manufacture/distribute pirated software?"
(China/Vietnam 92%, US 22%)

Moral code tested in real-life situations, such as:

- "Is getting an abortion immoral?"
- "Is affirmative action right or wrong?"
- "What are human rights, and how do we determine them?"
- "Do animals have rights as well?"
- "Is lying always wrong?" and "If not, when is it permissible?"
- "Should I allow a friend to copy my answers in an exam?"
- "Should I keep the umbrella I found in the taxi cab?"
- "Can I keep the \$10 excessive change?"

Applied Ethics

How do we overcome these conflicts?

Should we apply *situational ethics*?

- “moral principles can be cast aside in certain situations if love is best served” (Episcopal priest Joseph Fletcher, 1960s)
- concerned with the outcome or consequences of an action → the *end*, as opposed to an action being intrinsically wrong
- the ends *can* justify the means

Personal Ethics

Rules/morals (habits) you have acquired when growing up
(and still acquire/modify as you live on)

- there are good habits and bad habits

Virtues:

- (good) habits that incline people to do what is acceptable
- fairness, generosity, honesty, loyalty

Vices:

- (bad) habits of unacceptable behavior
- vanity, envy, greed, anger
- good corresponding habits: pride, admiration, ambition, force

These 'good vices' all can be catalysts of great
accomplishments and achievements

- improve over your competitor's product
- train harder than your opponent
- but, apply ethical rules in doing so (no sabotage, cheating, etc.)

Integrity

Act in accordance to a personal code of principles

- do as you expect others to do (recall Socrates)
- apply accountability and moral responsibility as necessary tools for maintaining consistency between one's actions and one's principles, methods and measures

Again, there are often conflicts that compromise consistency:

- you may be asked to work overtime to accomplish a certain company goal
 - integrity rule #1: overtime OK since it benefits the company
 - integrity rule #2: overtime should be properly compensated
- however, your boss may be over budget and cannot bill overtime
 - two rules are compromised and you need to decide which to choose or seek a deal with your company

So often have to make choices between right vs. right

- “Is it OK to drill for oil in Alaska?” preserve wildlife vs. oil feed

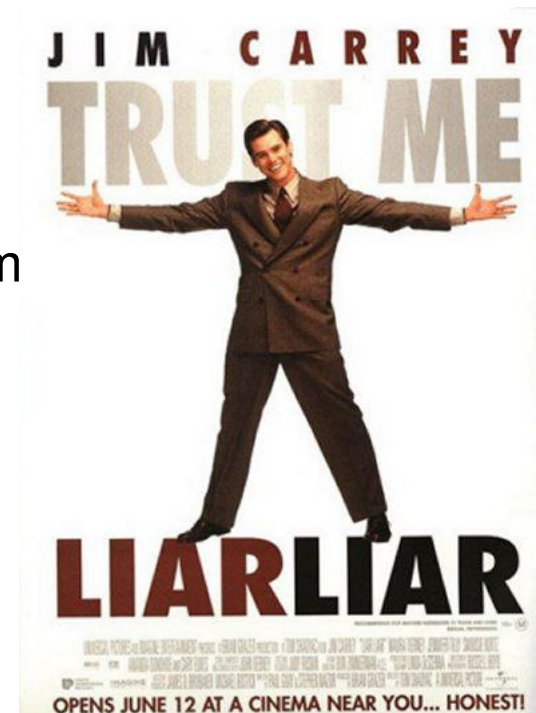
Important Test for Morals and Integrity: Truth/Lie

A lie is a deception in the form of an untruthful statement

- intended to deceive others
- motivated by maintaining a secret or reputation, protecting someone's feelings or to avoid a punishment
- a statement of something that is false with the intention that it be taken for the truth by oneself or someone else
- but there are different forms of lies, which challenge personal judgements of situational integrity and ethics

Severity of lie depends on context, situation, and intent

- need a moral understanding when to refrain from lying
- children do not have this
- some adults are habitual liars



Forms of Lies

There are many:

- fabrication: a statement not based on fact
- bald-faced lie: obvious lie
- lying by omission: leave out an important fact
- lie-to-children: simplification (the stork brought you)
- white lie: harmless lie to avoid harmful implication (your tie looks nice)
- emergency lie: strategic lie when it is dangerous to tell the truth
- perjury: false statement in court
- bluffing: tactic lie in a game, expected
- misleading: not an outright lie, but aimed to guide to untruth
- promotion lies: in advertising (you will love our new product)
- jocular lies: sarcasm, storytelling, comedy

There is a moral code when to apply these lies and when not:

- OK to tell white lie to a friend
- not OK to tell a lie to a colleague or a customer

Conclusion

So, when in doubt:

- recall Socrates words
- apply situational ethics and see the big picture

Savage Chickens

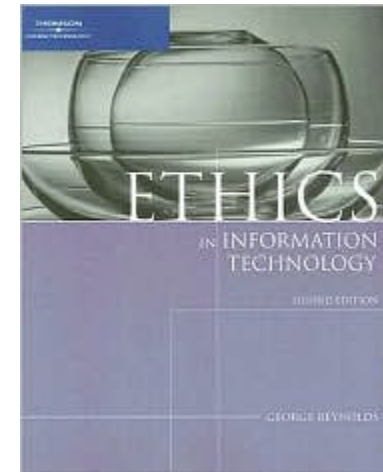
by Doug Savage



www.savagechickens.com

Course information

- 1-credit course
- <http://www.cs.sunysb.edu/~jgao/CSE302-spring09/>
- Textbook: Ethics in Information Technology, George Reynolds, second edition, 2005.
- Grading: Attendance (taken at random sessions): 10%
Term paper: 50%
Class presentation: 40%
- Follow the ethics code. Collaboration on assignments is not permitted.



Assignments

Reading Assignments: You are required to read the appropriate chapter from the text.

Term paper: You will write an 8-page term paper on a topic related to professional ethics in computing, drawing on one of the case studies in the syllabus or on personal experience. See also the Topics Page for a source of possible topics. The term-paper topic is due at the end of week 4; a draft is due at the end of week 9; and the final draft is due at the end of the semester.

Class Presentation: You will make a 10-minute class presentation (Powerpoint) on the topic of his term paper. The presenting student will be evaluated on his coverage of the topic and his ability to engage fellow students in discussion. Students in the class will be asked to evaluate their fellow students' presentations on content, clarity, and excitement level.

Syllabus

- Chap 2: Ethics for IT Professionals and IT Users
- Chap 3: Computer and Internet Crimes
- Chap 4: Privacy
- Chap 5: Freedom of Expression
- Chap 6: Intellectual Property
- Chap 7: Software Development
- The following weeks: student presentations.

- Any questions?