

A profession is who you are, not a contract.

Hopefully you're not fixated on questions like

- What do you get out of it?
- How much can you get paid?
- How rich can you get?
- What is the least effort you can put into this and still get paid?



Four traits of a professional

- Varied activities requiring special skills
- Society-centric motivation
- Personal standards of excellence
- Giving back to society



When you put many professionals together, what do you have?

- A profession isn't just defined by who you are
- A profession is also something you are <u>part of</u>
- "Most professional engineers adopt an institutional view of the organisations of the profession: they perceive them as bodies representing the profession and therefore deserving, even requiring, the loyalty of each engineer as an expression of his identity as a professional engineer."
- IEEE and ACM



Six traits of a profession

- Body of knowledge and art
- Educational process
- Standard of qualifications
- Standard of conduct
- Formally recognized status
- Organizations of the profession



Part of being a professional is behaving ethically

• "Ethics means something more than 'law' and 'morals'; it carries an additional connotation of 'rightness'."

- Breaking the <u>law</u>: can earn a <u>fine or jail</u> time
- Breaking a moral: can ruin your reputation
- Breaking an <u>ethic</u>: can ruin your <u>conscience</u>
- It's possible to break all three, simultaneously, but there's no bonus for doing so.



Legal, Moral, Ethical

• <u>Legal</u>: Right or Wrong according to laws of the state an individual resides in.

 Moral: Right or Wrong according to that which defines a person's character. Can be philosophy, religion, culture, etc

• <u>Ethical</u>: Right or Wrong according to standards of behavior expected by a group the individual belongs to.



Laws vs morals vs ethics

- Speeding in Los Angeles (driving 65 in a 55)
 - Illegal, moral ("everyone" does it), maybe ethical
- Speeding in Corvallis (driving 55 in a 25)
 - Illegal, immoral, unethical

- What might a software engineer do that is...
 - Illegal, immoral, unethical ?
 - Legal, immoral, unethical ?
 - Legal, moral, unethical ?

8 Principles of IEEE Code of Ethics

- Act in public interest
- Act in interest of clients and employers
- Produce quality products
- Maintain independent judgment
- Manage ethically
- Protect integrity of profession
- Support colleagues
- Pursue lifelong learning



IEEE Code of Ethics: Actions

- 1. PUBLIC Software engineers shall <u>act</u> consistently with the <u>public interest</u>.
- 2. CLIENT AND EMPLOYER Software engineers shall <u>act</u> in a manner that is in the best interests of their <u>client and employer</u> consistent with the public interest.

IEEE Code of Ethics: Products

 3. PRODUCT - Software engineers shall ensure that their <u>products</u> and related modifications meet the <u>highest professional standards</u> possible.

IEEE Code of Ethics: Hierarchy

- 4. JUDGMENT Software engineers shall maintain integrity and independence in their professional judgment.
- 5. MANAGEMENT Software engineering managers and leaders shall subscribe to and promote an <u>ethical approach</u> to the <u>management</u> of software development and maintenance.

IEEE Code of Ethics: Peers

- 6. PROFESSION Software engineers shall advance the <u>integrity and reputation</u> of the profession consistent with the public interest.
- 7. COLLEAGUES Software engineers shall be fair to and supportive of their colleagues.

IEEE Code of Ethics: Self

 8. SELF - Software engineers shall participate in <u>lifelong learning</u> regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.

True or false?

 "The young of today rise to idealism and altruistic motivation perhaps more readily than any previous generation. It must be the responsibility of this generation of our profession, and of the next generation, to see that our profession never will lose sight of its prime objective - the use of our professional talents in the service of the community."

This is a real concern

- The "news" is full of stories about corruption, malfeasance, greed, etc.
- Are you a chump for acting ethically, etc?
- Sociopaths often are rewarded
- Whistleblowers often are punished
- How will you feel when a catastrophe results from your improper action?
- Sadly you can't answer in advance...