Lecture 9-1
Professional Ethics
Is Software Engineering a Profession?

- In many ways software engineering is similar to other professions such as law or accounting
  - Dependence on professional education and practical training
  - Professional associations (IEEE, ACM)
  - Potential for bad decisions to cause significant public harm
- It’s not a “full-fledged” profession:
  - No formal accreditation/licensing system
- All the same, sensible to ask software engineers to follow a code of ethics.
  - One with significant support is described in the book.
  - Nothing it says ought to come as a big surprise at this point in the course 😊.
“It is unethical for computer scientists to aid in the development of autonomous weapon systems.”

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<th>Response</th>
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<th>Percentage</th>
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<td>16%</td>
</tr>
<tr>
<td>Agree</td>
<td>28</td>
<td>30%</td>
</tr>
<tr>
<td>Neutral</td>
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<tr>
<td>Disagree</td>
<td>28</td>
<td>30%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>4</td>
<td>4%</td>
</tr>
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Whistle-Blowing

• Revealing a real or potential harm to the public being caused by your employer.
  – Not an attempt to take revenge on the employer, e.g., for turning down a promotion
  – Not an attempt to avoid personal responsibility for a problem that is about to come to light anyway.

• Under what circumstances is whistle-blowing morally justified? When is it morally necessary?
Software Warranties

• Software companies tend to write license agreements saying that the software may not perform as promised
  – “we expressly disclaim ... the implied warranties of merchantability and fitness for a particular purpose”

• Why is this reasonable?
  – Software is expensive
  – Other expensive goods are backed up by warranties

• *Do software makers have a moral obligation to produce software that does what it promises?*