Software Patents

- Copyright vs. Patents
  - Copyright
    - Copyright protects "original works of authorship" including literary, dramatic, musical, artistic, and certain other works of expression. (uspto)
    - Copyright generally protects an expression of an idea.
  - Patents
    - Patents protect any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof (uspto)
    - Patents are applied to processes, machines, manufactures, or compositions of matter.
    - Patents generally protects the idea itself.
Software Patents

- No special patent process applied to software.
  - “Software Patents” is a shorthand reference for “a patent that has been given to an invention comprised of a software algorithm.

- Software in unique in that both copyright and patent protected can be granted at the same time.

- Patents on software where not granted prior to 1981 in the US because it was considered an expression of mathematical algorithms and outside the scope of patent protection.
  - Diamond v. Diehr / US Supreme Court ruled in favor of granting a patent for a machine controlled by a computer.

- Patents are not currently granted in the EU for “programs for computers” unless it also provides a “contribution that is not excluded and which is also technical” (epc)
Software Patents

- Patents are not inherently bad
  - Original intent of patents was to promote the mutual benefit to society and individual inventors.
    - Financial incentives to inventors by providing an exclusive monopoly to their invention for a limited time.
    - Patented inventions eventually fall out of patent protection and into the public commons.
    - Promotes innovation.
    - Keeps inventors inventing.

- Software Patents are inherently bad
Software Patents

- Inhibiting innovation with over broad patents
  - **Patent Name**: System apparatus and method for hosting and assigning domain names on a wide area network. (IdeaFlood, 1999). *Possible use: 3rd level domains, i.e., cs.calstatela.edu*
  - **Patent Name**: System and method of creating digital recordings of live performances (ClearChannel, 2000). *Possible use: Any one stop recording of live performances.*
  - **Patent Name**: Internet test-taking method. (Test.com, 1999) *Possible use: Distance learning, online books that include tests, online certification tests, and software testing done via the Internet*

(http://w2.eff.org/patent/)
Software Patents

- Inhibiting innovation
  - Amazon 'One-Click Shopping'
    - Barnes & Noble was successfully sued for having violated 'One-Click Shopping' for providing a similar feature.
    - Many different ways in which to configure a checkout stand in a bricks and mortar store ... or configure a digital checkout procedure.
    - Innovation with respect to increasing efficiency in e-commerce is stunted.
Software Patents

- Software patents can be used to intimidate individual inventors and companies.
  - Patent Portfolios.
    - Larger companies with massive software patent holdings can lock out individual inventors through intimidation.
    - Smaller innovative companies can be extorted into selling their inventions due to the high cost of patent battles.
  - Patent Trolling
    - Leveraging a purchased patent portfolio opportunistically through the legal system with no intent to manufacture or market the invention.
  - Removes Competitive from the Marketplace
Software Patents

- Ethical Frameworks
  - Utilitarianism - the end result is all that really matters, and that end result must bring the most benefit to the most people.
    - The software patent holders benefit
    - But the benefit to the smaller number of software patent holders compared to the decreased benefit to the number of software users does not compare.
  - Deontologism – doing the right thing, or principal based ethics.
    - Ambiguous. What is the 'right thing' for a Patent Troll or publicly traded company is a different 'right thing' for a software consumer.
Software Patents

- Software patents inhibit innovation and thus deprive the greatest number of people the greatest good.
- Software patents do not benefit individual inventors, and in some cases actually cause harm.