Impact of Computer Science

Computer Science has been at the cornerstone of many of the biggest innovations that we use to fuel everyday life. In 2009 a group from the Wharton School set out to figure out the most important innovations from the preceding 30 years. In creating this list, the judges defined innovation as *something new that creates new opportunities for growth and development.*

**Top 30 innovations: 1979-2009**

1. Internet, broadband, WWW (browser and html)
2. PC/laptop computers
3. Mobile phones
4. E-mail
5. DNA testing and sequencing/Human genome mapping
6. Magnetic Resonance Imaging (MRI)
7. Microprocessors
8. Fiber optics
9. Office software (spreadsheets, word processors)
10. Non-invasive laser/robotic surgery (laparoscopy)
11. Open source software and services (e.g., Linux, Wikipedia)
12. Light emitting diodes
13. Liquid crystal display (LCD)
14. GPS systems
15. Online shopping
16. Media file compression (jpeg, mpeg, mp3)
17. Microfinance
18. Photovoltaic Solar Energy
19. Large scale wind turbines
20. Social networking
21. Graphic user interface (GUI)
22. Digital photography/photography
23. RFID and applications (e.g., EZ Pass)
24. Genetically modified plants
25. Bio fuels
26. Barcodes and scanners
27. ATMs
28. Stents
29. SRAM flash memory
30. Antiretroviral treatment for AIDS

Impact of Computer Science on these Innovations

The field of Computer Science played an important role in the creation of many of these innovations, and has transformed the way each of these innovations now work. Everything from microfinance to DNA sequencing has been completely changed thanks to people applying computer science techniques and tools to help solve these problems.

Want to learn more about innovations made possible by Computer Science? Check out this video from our CS Principles course! [bit.ly/cs-innovation-video](http://bit.ly/cs-innovation-video)