Increasing Social Responsibility in Computing Professionals -- What Should CS Departments Do?

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The Old Image Crisis

MYV, CACM Nov. 2009:

"The computing field went through a perfect storm in the early 2000s: the dot-com and telecom crashes, the offshoring scare, and a research-funding crisis. After its glamour phase in the late 1990s, the field seems to have lost its luster. This has resulted in a precipitous drop in North American enrollments in undergraduate computer science programs."

The New Image Crisis?

Peggy Noonan, WSJ, Oct. 2017:

"Because all of their personal and financial information got hacked in the latest breach, because our country's real overlords are in Silicon Valley and appear to be moral Martians who operate on some weird new postmodern ethical wavelength. And they'll be the ones programming the robots that'll soon take all the jobs! "

Cyberia

Niall Ferguson, WSJ, Jan. 2018:

"Most alarming was the morphing of cyberspace into Cyberia, not to mention the Cyber-caliphate: a dark and lawless realm where malevolent actors ranging from Russian trolls to pro-ISIS Twitter users could work with impunity to subvert the institutional foundations of democracy."

The Tech Industry's War on Kids

Richard Freed, Medium, March 2018: "What none of these parents understand is that their children's and teens' destructive obsession with technology is the predictable consequence of a virtually unrecognized merger between the tech industry and psychology. This alliance pairs the consumer tech industry's immense wealth with the most sophisticated psychological research, making it possible to develop social media, video games, and phones with drug-like power to seduce young users."

The Age of Tech Superheroes Must End

C. Mims, WSJ, June 2018:

"Silicon Valley has an accountability crisis, and at its root is the idolatry of its founder-CEOs"







"The Black-Box Society", '15

"Every day, corporations are connecting the dots about our personal behavior—silently scrutinizing clues left behind by our work habits and Internet use. But who connects the dots about what firms are doing with all this information?"

"Technically Wrong", '17

"Many of the services we rely on are full of oversights, biases, and downright ethical nightmares: Chatbots that harass women. Signup forms that fail anyone who's not straight. Social media sites that send peppy messages about dead relatives. Algorithms that put more black people behind bars."

"Automating Inequality", '18

"Since the dawn of the digital age, decision-making in finance, employment, politics, health and human services has undergone revolutionary change. Today, automated systems—rather than humans control which neighborhoods get policed, which families attain needed resources, and who is investigated for fraud. While we all live under this new regime of data, the most invasive and punitive systems are aimed at the poor."

Our "Ender's Game" Moment!

- ◆ Ender's Game, Orson Scott Card, 1985:
 - Ender's team engages in a series of computersimulated battles, eventually destroying the enemy's planet, only to learn then that the battles were very real and a real planet has been destroyed.
- We thought we are just playing with computers, only to find our technology at the center of everything!

The Pottery-Barn Principle

"You broke it, you bought it!"

- We live now in the world we have created!
- We can no longer pretend that we are making the world an unqualified "better place".
- What is our social responsibility as computing professionals?
- What Should CS Departments Do?