Carnegie Mellon University

Student Perspectives

Tom Cortina

The State of Women in CS: An Investigative Report

by Alison DeNisco TechRepublic.com

"Top colleges boast about reaching gender parity in 'intro to computer science' courses. But very few of those women go on to graduate with a CS degree."

Factors:

- The intro course and confidence gap
- The geek gene (and some professors feel women don't have it)
- Drop off of women in advanced CS courses
- Sexism: alive and well
- Lack of women faculty as role models, mentors

Student Perspectives

Alexandra Hoang T4A.org

"Since being surrounded by so many analytical and technical thinkers, the pressure to learn how to code is always present. In a conversation with some friends, I found myself lost in discussions laced with programming jargon. When I fell back to my safe question and asked what they were doing during the weekend, I got answers like working on coding projects, doing computer science homework, or going to local hackathons. It is astonishing to realize the proportion of students involved in developing their own computer science education, as it prompts me to find a way to catch up."

Student Perspectives

Jessica Nyquist Princeton University

"As a computer science major, I do not identify with my program of study because I have not frequently personally interacted with faculty members in my first two years. The program is robust and well-taught, but I do feel like I missed out on the iconic liberal arts tight-knit academic community."

Diversity Gaps in Computer Science

Google-Gallup research

- Girls are less likely than boys to be aware of CS learning outside school, encouraged by teachers or parents...
- Black and Hispanic students are more interested and their parents are more likely to want them to learn CS compared to their White counterparts.
- Black and Hispanic students face discrepancies in access and exposure to CS classes and to computer use at home and school.
- Students rarely see computer scientists like themselves in the media, particularly girls and Hispanics.

Diversity Gaps in Computer Science

Google-ETR research

- Community college students struggle to efficiently move through the CS prerequisite chain of classes in preparation for transfer.
- Community college students are confused about computer science transfer pathways from their community college to their target four-year institution.
- Community college students have limited knowledge of how CS is applied in professional settings and how to prepare for a career in CS.

As Computing Coding Classes Swell, So Does Cheating

By Jess Bidgood and Jeremy Merrill New York Times

"College students have flooded into computer science courses across the country, recognizing them as an entree to coveted jobs at companies like Facebook and Google, not to mention the big prize: a start-up worth millions."

"To some students drawn to the classes, coding does not come easily. The coursework can be time-consuming. Troves of code online, on sites like GitHub, may have answers to the very assignment the student is wrestling with, posted by someone who previously took the course."