Aspirations in Computing

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Let’s Look at Some Facts

Source: NCWIT -- https://www.ncwit.org/resources/numbers

Crisis in Talent . . .

- Number of U.S. computing-related job openings expected by 2026 – 3.5 million or 3,500,000
- Percent of these jobs that could be filled by U.S. computing bachelor's degree recipients by 2026 – 17%
- Simple arithmetic yields nearly 3 million computing jobs will go begging for bachelor's degree holders
- Market place opportunities in computing at an all-time high – simple micro-economics in action means very high salaries for a very limited supply of properly trained talent irrespective of gender, race, etc.

Crisis in gender . . .

2017 demographics for women in the workforce

- 57% of professional occupations held by women
- 26% of professional computing occupations held by women
- 17% of Fortune 500 Chief Information Officer (CIO) positions held by women

Crisis in gender . . .

2017 demographics for women taking AP exams

- 56% of AP test takers were female
- 47% of math AP test takers were female
- 23% of Computer Science AP test takers were female

Crisis in gender . . .

2016 demographics for bachelor's degrees earned

- 57% of the all recipients were female
- 19% of Computer and Information Sciences recipients were female
- 18% of Computer Science recipients were female *contrasted* with 37% in 1985

Crisis in gender/ethnicity . . .

2017 demographics for women in computing workforce – remember 26% total

- 3% were African-American vs. 12.7% of entire workforce
- 5% were Asian
- 1% were Hispanic vs. 17.1% of entire workforce

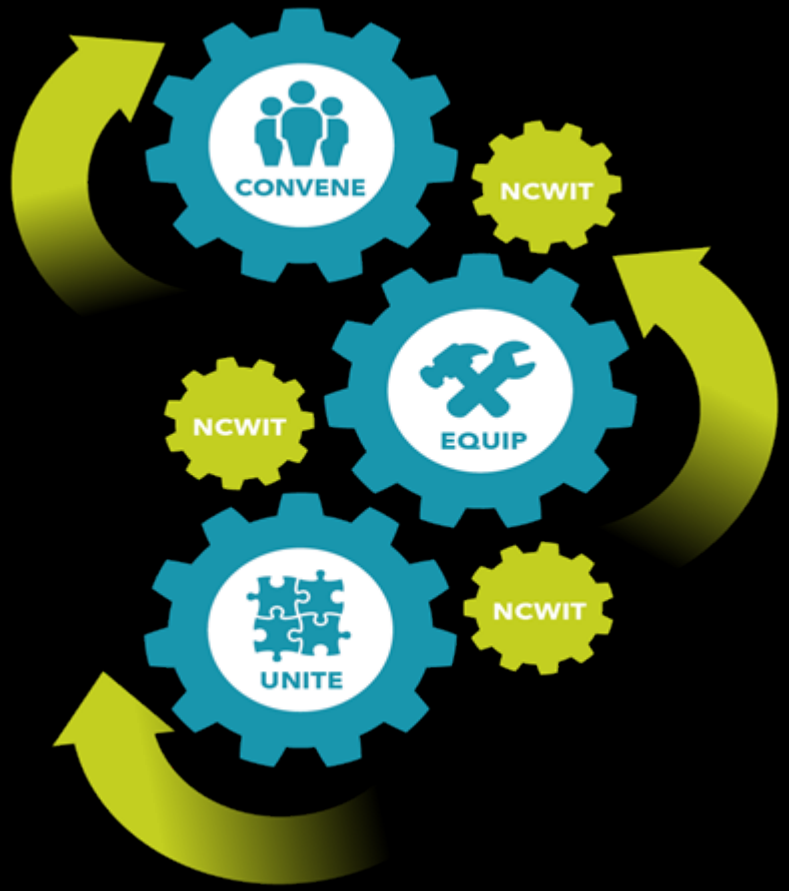
2018 reality check . . .

- At WTAMU percentage of female students remains overall below 10%
- At WTAMU most CS students have contract in hand by summer between junior and senior year AND 99% of all graduates have job immediately upon graduation
- All CS students are aggressively recruited beginning in their freshman year by the likes of Bank of America, BMC Software, CA Technologies, CGI, Experian, Fidelity Investments, Google, IBM, Texas Instruments, Visa, etc. Female students are super-aggressively recruited.
- Summer internships offering $25 to $35 an hour for 10 to 12 weeks including housing for the duration and transportation to/from, especially for more distant locations.
- Starting salaries for 2018 graduates appear to be ranging $75K to $90K and better

What can you do and what resources are available?

NCWIT

NCWIT – Change Leaders



NCWIT was established in 2004, with support from the National Science Foundation, with a mission to **significantly increase** girls' and women's **meaningful participation** in computing.

NCWIT - Equips

free, online research-based resources

https://www.ncwit.org/resources

NCWIT Aspirations in COMPUTING

The **NCWIT Aspirations in Computing Community** provides ongoing support and encouragement to nearly 10,000 technical women, resulting in long-term impact on women's participation in computing. AiC Community members are within an expansive network of peers, volunteers, and NCWIT Alliance member organizations who offer exclusive access to scholarships, internships, and professional work. These computing-related opportunities allow AiC Community members to strengthen their leadership, technical, and entrepreneurial skills, further preparing and motivating them to participate in the computing workforce.

NCWIT Aspirations in COMPUTING

AiC Awards: Identifying and Honoring Technical Women and Their Influencers

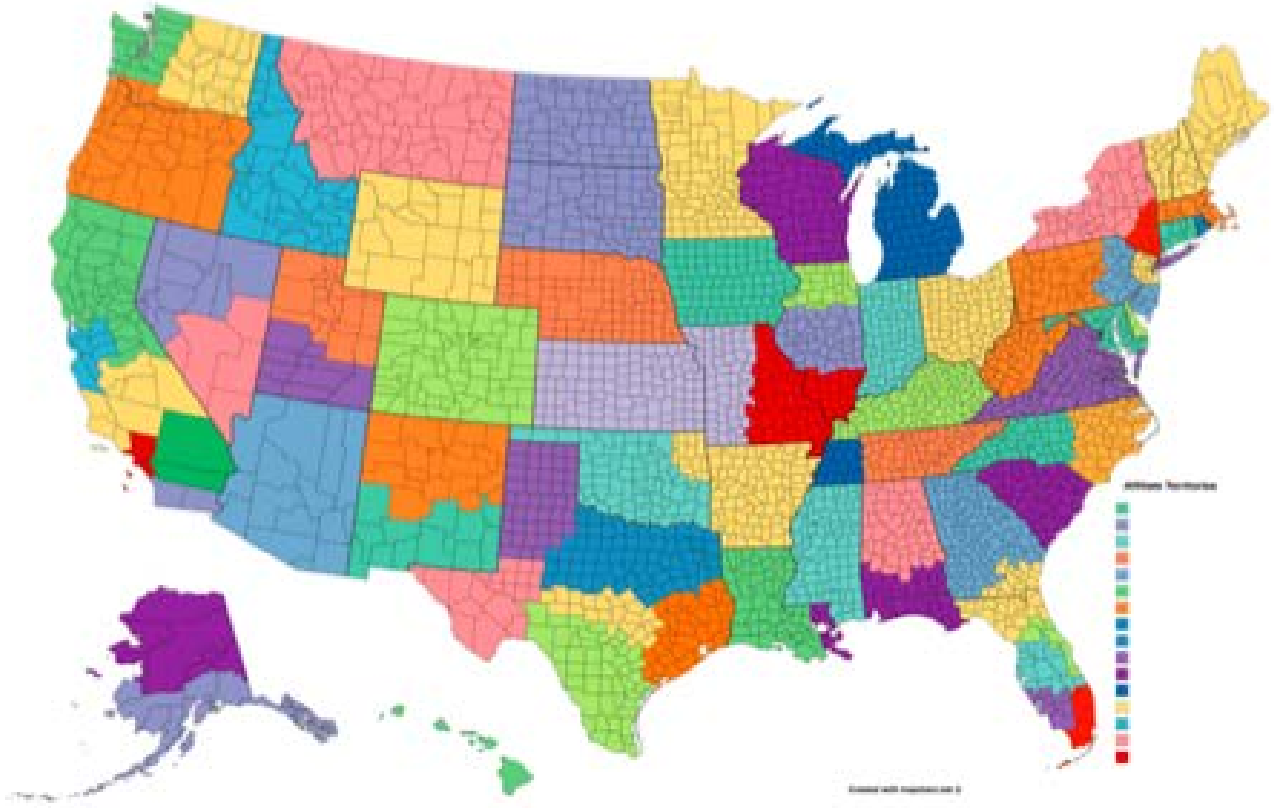
K-12	HIGH SCHOOL *The high school awards include both national and local recognition in 75 regions.*		COLLEGE
NCWIT AspireIT	Award for Aspirations in Computing	Aspirations in Computing EDUCATOR AWARD	NCWIT COLLEGIATE AWARD
NCWIT AspireIT connects high school and college women with K-12 girls to teach programming and computational thinking fundamentals in fun, creative environments.	The **NCWIT Award for Aspirations in Computing** 9th-12th grade women who are active and interested in computing and encourages them to pursue their passions.	The **NCWIT Aspirations in Computing Educator Award** publicly celebrates formal and informal educators who encourage 9th-12th grade women's interest and ability in computing.	The **NCWIT Collegiate Award** honors undergraduate and graduate women whose technical contributions to projects demonstrate a high level of creativity and potential impact.

AiC Community: Encouraging Persistence Into Computing Education and Careers

9th Grade through College+

Aspirations Affiliates

50 States, Puerto Rico, USVI, Guam



ncwit.org

NCWIT
Aspirations in
Computing
EDUCATOR AWARD

CALLING ALL

teachers, counselors, administrators, mentors, or other influencers who support technical 9th-12th grade women!

Apply for the NCWIT Aspirations in Computing Educator Award:

http://bit.ly/AiCEdAward.

CALLING ALL hackers, coders, and 9th-12th grade women!

Apply for the NCWIT Award for Aspirations in Computing:

http://bit.ly/AiCHSAward.

https://www.aspirations.org/aspirations-community/texas-panhandle-plains

Named after TPWD region designation omitting rolling plains – includes all of Regions 16 and 17

That's all . . . . .

Questions?

Comments?

Observations?

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Presentation available on github @ https://github.com/HHaiduk/thunder