

THE PROBLEM

A robust technology workforce is vital to ensuring continued technology leadership in an increasingly competitive and uncertain global landscape that includes rapidly advancing fields such as AI and quantum computing. Although the U.S. currently leads in R&D investment and groundbreaking discoveries, global competition is accelerating. Even within the U.S., temporary visa holders earn more than half of doctoral degrees in computer and information sciences (59%), engineering (60%), and mathematics and statistics (54%)—all fields crucial for national security and economic prosperity. Similarly, 60% of computer science master’s degrees awarded in 2022-2023 went to international students, underscoring the nation’s increasing dependence on global talent to sustain its high tech workforce. Additionally, in 2022, the U.S. Patent and Trademark Office awarded 47% of patents to domestic inventors, and 53% to foreign inventors.

Yet historically, the U.S. educational system has been slow to foster tech talent from within. For example, according to code.org, only 6.4% of high school students participated in a foundational computer science class in 2024.

“NCWIT’s ability to support the entire U.S. computing community during these uncertain times is well proven. With some additional financial backing, we can expand its national infrastructure and ensure everybody is given access to technology educational paths and careers. This is especially critical for girls and women, the largest underrepresented group in computing.”

BRAD FELD,
Co-Founder Foundry Group, Techstars and Anchor Point
Foundation. Founding Board Chair, NCWIT

THE SOLUTION

NCWIT was founded in 2004, with a grant from the National Science Foundation (NSF) and a mission to broaden participation in computing based on research foundations and best practices. With more than 1,600 organizational members across the U.S., NCWIT has an exemplary track record of providing the national network and resources necessary for educators and industry leaders to collaborate, increase access to learning, open new career pathways, and foster environments where all students and workers can thrive. To sustain and advance a national technology workforce, it’s imperative that this community stays together, continues to learn, and accelerates progress.

NOW IS THE TIME to augment previously relied upon workforce development approaches with free online educational resources, virtual expert-led learning events, broad community support, and inspiration for those who continue to advocate for a broader technology workforce. Otherwise, much of our country’s progress in building a robust workforce will be jeopardized.

3.8M

THERE WILL BE AN ESTIMATED 3.8
MILLION U.S.
COMPUTING-RELATED JOB
OPENINGS BY 2032.

18%

ONLY 18% OF THESE COULD BE
FILLED AT THE CURRENT RATE OF
COMPUTING DEGREE ATTAINMENT
IN THE U.S.

8%

ONLY 8% OF U.S.-INVENTED I.T.
PATENTS ARE HELD BY WOMEN.

NOW IS THE TIME

TO CREATE additional online research-based self-paced learning materials.

TO INCREASE the ability of K-12 educators to encourage STEM for all students by extending Teach Engineering, the nation's largest repository of free hands-on engineering activities.

TO EXPAND the reach of NCWIT's Counselors for Computing, helping counselors guide more students toward computing and technology fields.

TO OFFER extended national community support, including:

- More expert-led virtual learning sessions.
- Convenings on rapidly advancing subfields like quantum and AI.
- Increased support for those marginalized by gender through Aspirations in Computing.
- Support for struggling communities and programs that once supported girls and women in tech.

"The critical need to broaden participation in computing is driven by business and human issues that affect us all, and we all stand to benefit from expanding existing talent pools."

LUCY SANDERS,

NCWIT Co-founder and Executive-in-Residence

NOW IS THE TIME TO HELP

NCWIT seeks dedicated funding to enable our community of over 1,600 organizations throughout the country to build on progress we've made to date. We must bolster the technical workforce, and we must make sure no one gets left behind. We are poised and ready to extend our programmatic initiatives, sustain our research base, and inspire persistence, but we need your help.

Please contact us at [**nowisthetime@ncwit.org**](mailto:nowisthetime@ncwit.org)

ncwit.org