

# Diversifying the Face of Computing through Re-entry Initiatives for Returning Women

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## ABSTRACT

Recruitment, retention, and graduation of women in science, technology, engineering, and mathematics (STEM) training are critical needs in our nation [1, 2]. Within STEM, the computing and tech industry, specifically some niches, are expected to grow job opportunities more quickly than others. Emerging Technology (EmTech) concentrations like cybersecurity, data science, mobile development, machine learning, and cloud computing will have thousands of jobs in the next decade which will require a large pool of technical professionals. EmTech can use the largest untapped talent pool of women and returning women to fill the gap in the workforce. Hence, to understand the barriers and challenges faced by returning women to (re-)enter computing and tech fields, a three-day virtual conference, NSF RESET, was organized in March 2021. In this poster, we present the preliminary results on conference attendees' satisfaction level and effectiveness in facilitating resources to (re-)enter EmTech educational and professional pipeline.

## CCS CONCEPTS

- Social and professional topics → Computing education programs.

## KEYWORD

Emerging technology; computing; returning women; diversity

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## 1 GOAL OF THE CONFERENCE

To better understand the barriers and challenges faced by returning women to (re-)enter EmTech fields, a three-day national

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virtual conference, NSF RESET, was held in March 2021. There were 444 women registrants for the conference and 2,125 total views. It is intended to provide a platform to discuss and suggest recommendations about the individual, programmatic, institutional, evaluation-based, and evidence-based strategies that can enable returning women to re-enter the EmTech educational and professional pipeline in greater numbers. The conference has three primary goals: (1) Identify the barriers for returning women to enter EmTech education and workforce; (2) Inform best practices to create effective re-entry strategies in EmTech for returning women; (3) Connect with scholars, policy makers and leaders to make change in EmTech.

## 2 STUDY METHODOLOGY

This study included three main data collection components: post-sessions surveys for all sessions; a post-conference survey; and focus groups with attendees to discuss their experiences and perspectives in computing and technology fields. The evaluation focused on event satisfaction, understanding the barriers women face when returning to work and/or education after a career break, and recommendations for improving this transition.

## 3 CONTRIBUTIONS

In this poster, we present the study methodology utilized to measure participant's satisfaction level and the conference's effectiveness in identifying appropriate resources for the community members to (re-)enter EmTech educational and professional pipeline. We also report in detail the participant demographics, satisfaction, and recommendations.

## ACKNOWLEDGMENTS

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- [2] The United States Bureau of Labor Statistics. URL: <https://www.bls.gov/spotlight/2017/science-technology-engineering-and-mathematics-stem-occupations-past-present-and-future/home.htm>.