

Review on Women Participation in Technology Field

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Abstract : There is a Chinese maxim that says, "Ladies may hold up half of the sky." This precept is especially valid for the innovation world as Women make up half of the complete clients, despite the fact that they are generally underrepresented in the business universe of innovation. This pattern isn't satisfactory and unsustainable as having ladies in the workforce is unfavorable to the mechanical improvement and stagnating monetary development This paper will focus on the participation of the Women in the technology field all around the globe and the review the contribution of women in technical field..

IndexTerms – Technology , Women in IT.

I. INTRODUCTION

Natural language processing is give the stage where When most people think of leaders in the technology industry, certain names come to mind. Elon Musk, Bill Gates, and the late Steve Jobs, just to name a few. Unfortunately, most people might struggle to name a woman who has made their mark or is a leader in the technology industry. Thanks to Netflix, some people might know about Hedy Lamarr, a 50s and 60s era actress without whom innovations like WiFi, Bluetooth, and GPS might not exist. She along with composer George Antheil developed a radio guidance system for torpedoes that utilized frequency hopping and spread system technology. [1]

In fact, when asked if they could name a female leader in technology, only 8.3% of respondents said they could. It gets worse. Of that 8.3 %, one quarter responded either "Alexa" or "Siri." "Not only are women overlooked when it comes to jobs in technology, they often face unique challenges such as pay gaps and gender discrimination," says Sherry Cross, an attorney at Simmrin Law Group. However, there are numerous women who are pioneering the technology field and becoming role models for others striving to emulate them. Here are just a few of them. [1]

The time of globalization and quick innovative improvement has changed individuals' lives drastically. Science and innovation assume a critical job in the contemporary society. Government in created and creating nations perceive the significance of the advancement of S&T circle. The jobs of people have changed drastically in the contemporary society. Ladies have more opportunity to communicate and take dynamic part in the improvement of advancements, in spite of the way that there are still issues in this circle. As expressed in the report by the United Nations(2011) called Applying a Gender Lens to Science, Technology and Innovation, : "There is likewise requirement for acknowledgment of the significance of applying a "sexual orientation focal point" to STI for improvement. For sure, STI strategies and projects won't be successful, impartial and manageable except if the sex focal point is applied to mirror the points, concerns, circumstance and capacities of the two ladies and men" (11). Individuals understand the sexual orientation balance is one of the segments of solid society and genuine improvement is incomprehensible without it. Just comprehension of commitment ladies can make to the advancement of science and innovation can expedite positive effect the improvement of this circle. [2]

At the present minute everywhere throughout the world, with little exemptions, ladies play a functioning social job and show their capacities in a ton of circles. These days ladies are dynamic in great creation industry, normal assets the board, instructive circle, network the executives. Ladies possess various situations in these circles and callings in the circles referenced above are for the most part viewed as female ones . Enormous level of ladies work in the restorative business, too. In the creating nations ladies are additionally regularly associated with agrarian circle and participate in the generation of sustenance, selling it and cultivating. Also, the vast majority of ladies have extra trouble, for example, home work and care about the individuals from the family. [2]

In spite of the developing temps of mechanical improvement and prominence of women's liberation, ladies don't at present have equivalent situation in the general public. "In spite of the fact that ladies and young ladies make up around 50 percent of the worldwide populace, they approach substantially less than half of the assets regarding innovation, financing, land, preparing and training, and data" (Applying a Gender Lens to Science, Technology and Innovation, 12). A great deal experts accept that genuine advancement and improvement are unrealistic without ladies' dynamic interest in these procedures. The sexual orientation focal point would be a fundamental commitment to the advancement of STI circle and would empower individuals to meet the worldwide changes. "UNESCO figures uncover that in 121 nations with accessible information, ladies include 29 percent of specialists however there were huge incongruities among locales. For instance, in Latin America and the Caribbean, 46 percent of specialists are female and Argentina, Cuba, Brazil, Paraguay and Venezuela have accomplished sex equality. In Asia, ladies comprise just 18 percent of scientists generally speaking. India and Japan have 13 percent female specialists and South Korea has 15 percent. In Africa ladies involved around 33 percent of scientists" (UNESCO 2009). These numbers demonstrate that ladies' cooperation in STI is exceptionally low. Indeed, even in the nations with relatively high rates, ladies' support doesn't make even 50 percent. These outcomes demonstrate that sexual orientation imbalance still exists in this circle and it is important to give trustworthy consideration to this issue. The Baltic nations demonstrate the best outcomes in this circle. Ladies' commitment in STI is relatively high and is regularly higher than 50 percents. Among such nations are Lithuania (68.3 %), Estonia (63.9%), Bulgaria (63.8 %), and Latvia (63.2 %) (Human Resources in Science and Technology). The experience of these nations

can turn into an important assistance for different nations which need to build up sexual orientation equity in the circle of science and innovation. [2].

II. WOMEN IN TECHNOLOGY FROM OUTSIDE INDIA

Women's numerous commitments to technology are every now and again let well enough alone for the history books. In any case, recently, that has been changing — in any event a bit. [3]

Ada Lovelace, thought about the main software engineer and a visionary for what programming and PCs could in the long run become, has a technology grant named after her, and an occasion committed to commending her inheritance.

Katherine Johnson in the mean time, the NASA "PC" in charge of effectively plotting the flight ways of a portion of America's soonest space investigation campaigns, was the subject of the Hollywood blockbuster *Hidden Figures* (and the book it depends on).



Fig 1. Katherine Johnson

Katherine Johnson, whose computations empowered a portion of NASA's first space investigation, was depicted by Taraji P. Henson in '*Concealed Figures*.'

In any case, the tales of unreasonably a large number of the women who drove advancement in the nineteenth, twentieth, and into the 21st hundreds of years — these key mechanical engineers of present day life — have long gone unheard, their gestures of recognition uncelebrated. Shouldn't something be said about the lady who made the Palm Pilot, the lady who made telecommuting a reality, the lady who concocted web based dating, or the lady who aided Obama spare the web? (Indeed, they were all women.) [3]

1. Williamina Fleming and the Harvard "Computers"

In the late 1800s, men at the Harvard College Observatory were caught up with looking at the sky through telescopes, gathering information about the stars and the planets. Yet, how to manage this crude data?

The leader of the Observatory, Edward Pickering, required somebody to crunch the cosmic numbers so as to ascertain connections and viably measure the universe. Men apparently turned down their noses at this "administrative" work. So Pickering asked his housemaid, Williamina Fleming, to fill in as a "PC" at Harvard..

Fleming concurred, proceeding to lead a group of in excess of 80 women who did the computational work that is in charge of how we comprehend the universe today. [4]

2. The Women of ENIAC

The possibility that calculation and writing computer programs was dreary women's work reached out into the twentieth century (until men discovered how cool it was).

In the primary portion of the twentieth century, Harvard's "PCs" developed into a unit of female mathematicians at what might progress toward becoming NASA and its Jet Propulsion Laboratory, working during World War II for the benefit of the U.S. Military. The figurings they did plotting ballistic directions were tedious and exceedingly entangled. Two men chose to assemble a machine that could complete these counts. It was known as the ENIAC, and it's presently viewed as the principal electrical PC.

Be that as it may, it was the women mathematicians who really modified the ENIAC. The ENIAC manufacturers selected six women who turned into the world's first coders, controlling the ENIAC to figure rocket directions. [4]

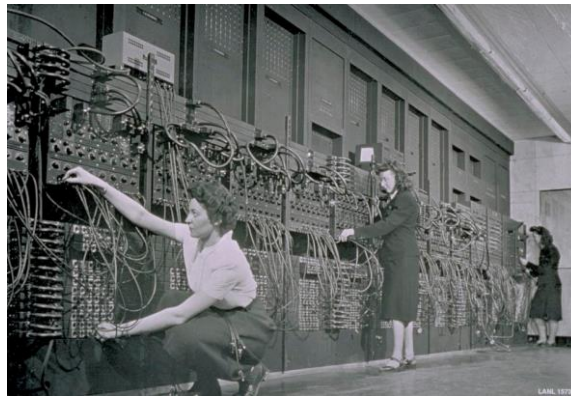


Fig 2. Women Scientist Working on ENIAC

The work they accomplished for the military during the 1940s brought about the main programming program, the improvement of PC memory and capacity, and the beginnings of programming language. [4]

3. The 'mother of computing': Grace Hopper

"The mother of processing" additionally got her beginning in the military. In the late 1940s, Grace Hopper worked at the Harvard Computation Lab as a major aspect of the Navy Reserve, programming the Mark 1 PC that carried speed and precision to military activities.

Afterward, she moved to the Eckert-Mauchly Computer Corp, where she filled in as a senior mathematician. She built up the UNIVAC I PC, the principal business-arranged machine. Her awards incorporate making the primary compiler: programming that makes an interpretation of math into language and brings together programming guidance. She was one of the modelers of "another incorporated coding" called COBOL, which is as yet a standard of information preparing today. Most quite, she's credited with the possibility that PC code could be composed and read like language.

4. Annie Easley

Annie Easley made the hop from "human PC" to software engineer while working at the mid-century office of what might progress toward becoming NASA. Running reenactments at a cracking "Reactor Lab," she was one of just four African-American representatives. She is notable for her work empowering women and non-white individuals to enter STEM fields. [5]



Fig 3. Annie Easley.

Afterward, her work as a software engineer included vitality change frameworks. As indicated by NASA, she "created and actualized code" that prompted the advancement of the battery utilized in the principal half and half vehicles. My pleasure, Prius drivers. [6]

5. Mary Allen Wilkes

Not exclusively did Mary Allen Wilkes created what is currently viewed as the main "PC" — she was additionally the primary individual to have a PC in her home. Wilkes chipped away at the LINC PC as a software engineer and guidelines creator. She is credited with composing the LINC's working project manual, and she was additionally the software engineer of the LAP6 working framework for the LINC. In a 2011 meeting, she uncovered that she really took the LINC home with her so as to compose the working framework, making working remotely a reality for such a significant number of us today.

6. Adele Goldberg

Without this lady, the Apple work area condition probably won't look the manner in which it does today.

Goldberg was a specialist at the Xerox Palo Alto Research Center (PARC) during the 1970s. She was the solitary lady among a gathering of men who, together, fabricated the Smalltalk-80 programming language and built up the foundation and plan for covering windows in plain view screens, or "Graphical User Interface" (GUI). [7]



Fig 4. XEROX Corporation

In the PBS TV show *Triumph of the Nerds*, Goldberg uncovered that she was constrained by her bosses to indicate Smalltalk and the GUI to Steve Jobs and his group, despite the fact that she figured it was certifiably not a smart thought to show Jobs their protected innovation. In a similar show, Jobs said he was transfixed by Smalltalk, and that he knew the GUI technology Goldberg had helped created spoken to the fate of figuring, and of Apple.

7. Joan Ball

Obviously, a gathering of men at Harvard get acknowledgment for the first mechanized dating administration, called 'Activity Match.' But it was really a lady in England who previously concocted an approach to decide similarity utilizing a PC.

Joan Ball established and ran the St. James Computer Dating Service, which she later re-named Com-Pat (another way to say "automated similarity). She deciphered review answers about what a forthcoming sweetheart didn't need in an accomplice to punch cards, which she went through a period shared PC. Her program would uncover the "coordinate" in the framework, and individuals utilizing the administration would get the name and address of whoever they had been matched with. She made the principal coordinate by-PC in 1964 — a year prior to Operation Match at Harvard was ready for action. Along these lines, Tinder and OkCupid clients, you truly have Joan Ball to thank..

8. Karen Spärck Jones

The web indexes we utilize day by day depend on the common language handling revelations made by one female PC researcher, Karen Spärck Jones. She was selected to Cambridge into the "Language Research Unit" by another female teacher, the computational etymologist Margaret Masterman.

Jones' most outstanding accomplishments laid the foundation for the kind of data recovery we use today. She brought the utilization of thesauri into language preparing, considering computational acknowledgment of comparative words. Furthermore, she additionally presented the thought and techniques for "term gauging" in data recovery, which helped inquiries figure out which terms were the most important. [7]

III. INDIAN WOMEN IN TECHNOLOGY FIELD

1. Rekha Menon

You've most likely known about this monster worldwide organization called Accenture yet did you realize that a sweet and enchanting lady named Rekha Menon is their director? She assumed a vital job in heightening India from a poor business goal to one of the most gainful nations to work together by fastidiously arranging, observing and executing business techniques. [8]

2. Vanitha Narayanan

We've all utilized IBM machines and programming at a point or another. This organization has assumed a vital job in the advancement of Indian plan of action and Mrs Vanitha Narayanan has consistently been there to help – first as overseeing executive and later as the director. She was additionally chosen by the President as director for the leading group of governors of the renowned National Institute of Technology.

3. Kumud Srinivasan

She is frequently depicted as the sparkling star with regards to women in tech essentially for her past situation as the leader of Intel India. Instructed in Berkeley, she is a working mother serving presently as the VP in one of the Intel subdivision which makes stockpiling equipment.

She has numerous outside degrees and one degree in financial aspects from Calcutta University.

4. Aruna Jayanthi

This next lady in tech has been portrayed by Business India as the most influential women in India. Aruna Jayanthi is presently the CEO of a re-appropriating organization called Capgemini – an organization that scored over a 12 billion Euro turnout in 2016. Before this, she filled in as the Global Delivery Head for a similar organization. She is one of the board individuals from the National Institute of Technology, Calicut.

5. Neelam Dhawan

You most likely definitely realize that it is a troublesome assignment to get enlisted in an organization so large as Microsoft. However, Neelam Dhawan did only that She is presently the overseeing chief of Hewlett-Packard who recently served in a similar post yet for Microsoft. She has additionally dallied with HCL and IBM for brief timeframes She loans her estimated viewpoints to NASSCOM trying to improve the Software business pattern in India. [8]

IV. INDIAN WOMEN IN TECHNOLOGY FIELD

Women have assumed a noteworthy job in figuring for quite a long time just as men. The motivation behind this paper is to pick up learning on women engaged with technology who for reasons unknown don't pick up as much acknowledgment as do men.

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