# Anita Borg

## Biography of a Software Engineer

#### 1 Introduction

Anita Borg was an American computer scientist born on the 17<sup>th</sup> of January 1949 in Chicago, Illinois (Anita Borg - Wikipedia, 2021). Borg attended the University of Washington for two years and learned how to program while working at an insurance company. Although Anita did not initially intend to work in computer science, she went on to receive her doctorate in 1981 from New York University for her work on synchronization efficiency in operating systems (Anita Borg | American computer scientist, 2021). I have chosen to write this biography on Anita Borg because of her huge positive influence and advocacy for women in computing in addition to her impressive work as a software engineer.

### 2 Career

After receiving her PhD, Anita worked in a start-up company on fault tolerant UNIX operating systems for three years before working at Nixdorf Computers building an operating system for one year (Gifts of Speech - Anita Borg, 2021).

In 1986, Borg began working for Digital Equipment Corporation where she spent twelve years and began her work in email communication. In 1987, she founded Systers, an email mailing list for technical women in computing. This led to Anita's work in email communication in the Network Systems Laboratory where she developed MECCA, an email communication and information system designed to allow communication in membership-based communities. This system was different from other emailing systems at the time due to its focus on memberships and the ability to opt in or out of certain topics, allowing for functionalities such as mailing lists and publication services (Anita Borg, 2021). In 1997, Borg went on to work in research at Xerox PARC.

## 3 Work for Women in Computer Science

## 3.1 Systems

After attending the Symposium on Operating Systems Principles conference in 1987, Anita started Systers with the email addresses of twenty women in attendance at the conference. This initial small emailing list was made for the discussion of technical issues and sharing of resources in an environment only for women. The group grew rapidly amongst women in the field, now with over 3000 members from more than fifty countries across the world (Systers - Wikipedia, 2021). At the time of its invention, Anita founded the group because of the dramatic lack of women in her field and felt that women in tech deserved the chance to discuss issues in a safe place where they weren't "drowned out by the voices of men" (Gurak,1999). The group has allowed women of all ages at any stage to connect with other women in the field. Systers remains to be the oldest community for women in computing, with new members still constantly joining.

## 3.2 Grace Hopper Celebration of Women in Computing

In 1994, Anita worked alongside Dr Telle Whitney to create the Grace Hopper Celebration of Women in Computing as a tribute to the famous Grace Hopper, a pioneer of computer programming. The event brings women in technology together to highlight and celebrate their achievements whilst also providing networking and mentoring opportunities to attendees (The History of GHC Conference | Grace Hopper Celebration, 2021). The event was initially created because Borg and Whitney were unsatisfied with the number of women at computing conferences and felt inspired to create a female-only event.

## 3.3 Anita Borg Institute for Women and Technology

In 1997, Borg founded the Institute for Women and Technology, a non-profit organisation now known as the Anita Borg Institute for Women and Technology. The institute was created as a way to increase female representation in technology and to allow women to "assume their rightful place at the table creating the technology of the future" (About Anita Borg & Supporting Women Technologists - AnitaB.org, 2021). It ran a multitude of programs aimed at giving

women a voice in technological advancements and creating technology to benefit women. The institute has grown rapidly in size and continues to work alongside organisations and academic establishments to support women in computing.

#### 4 Achievements

Borg has received a huge amount of recognition for her work in computing. She has served on multiple committees including the National Research Council's Committee on Women in Science and was asked by President Bill Clinton to serve on the Presidential Commission for the Advancement of Women and Minorities in Science, Engineering, and Technology in 1999 (WITI - Dr. Anita Borg, 2021).

Anita has also been the recipient of many awards including the Augusta Ada Lovelace Award from the Association for Women in Computing. Furthermore, she received an honorary doctorate from Carnegie Mellon University in science and technology and was listed as one of the Top 100 Women in Computing by Open Computing.

#### 5 Conclusion

In conclusion, Anita Borg made great strides as a software engineer to create technologies that are useful to others and to help other women in the field. Although representation of women in the field can still be improved, Anita's work has undeniably helped thousands of women to pursue careers in technology in a space where they now feel their voices are heard. From this, Anita's work is undoubtedly inspiring but also instrumental in generating support for future women in computing.

## References

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