

Anita Borg - Biography

SOFTWARE ENGINEERING REPORT

ANNA-ZORINA HONER – HONERA@TCD.IE

Early Life.

Anita Borg was born in Illinois in the year 1949 to a housewife mother, and salesman father. She had a humble beginning, her family spent some time moving through America, finally settling in Washington. As a child, she enjoyed maths, and often solved her homework with the help of her mother, but once finished with school, she did not pursue a career in it. Borg attended the University of Washington between 1967 and 1969, but never settled on a major, instead choosing to drop out and work at an insurance broker at the age of twenty. In this time, Borg began to teach herself COBOL, later finding it so intriguing that she decided to return to university to undertake a degree in computer science. Borg was accepted into New York University where she completed her undergraduate and immediately applied to the PhD program without much hope. She was supervised by Robert B.K. Dewar and Gerald Belpaire throughout her thesis and after five years of full time study (with another three part-time years of study additionally), she was granted a PhD for her paper researching the synchronisation efficiency of various OS (Borg, Synchronization Efficiency , 1981). Belpaire was unfortunately let go the day after his arrangement with Borg was made, but continued to work with her while he pursued other work.

Career.

Following her PhD, Borg spent time working with UNIX-based OS, designing an OS that would continue working even in the event of parts failing. Her builds landed her first in Auragen, New Jersey, and then later in Germany, with Nixdorf Computer AG. The final product of this work was the TARGON, made primarily of “off-the-shelf-parts” rather than custom made parts but was bought by Nixdorf when Auragen collapsed. Her work with these companies lasted until 1986, where she began the project she may be most well known for. She was employed by DEC (Digital Equipment Corporation) to work on generating a method of address tracing, eventually leading her to aid the development of systems to support virtual communication. Borg’s work with DEC did not begin with the intention of working on email systems, however. Initially she was hired to work on operation systems, which later morphed into attempting to simulate the transfer of large amounts of data between caches.

Woman in Technology.

Borg, while attending SOSP (Symposium on Operating Systems Principals), developed Systems in 1987 - a mailing list for woman working in operating systems research, but grew in

size until it was open to any woman in computing. Borg used Syster as the basis for Mecca - Borg's attempt to centralise email, allowing users to have a profile about themselves where they could do various tasks such as filtering emails, sending mass emails. At this time email systems were designed to "serve people inside a company", and there was not much support for individuals. Unfortunately, Borg did not receive support from DEC during this project and noted this as a reason for her departure from the company some years later. Another major reason listed by Borg was the gender discrimination she experienced when she was removed from a project as they needed someone "older—with grey hair, who was male" (Borg, Oral History: Anita Borg, 2001).

Following this, Borg began to work towards creating more opportunities for woman to give input into the design of computer products. Her first attempt – the Diversity Collection – failed due to lack of funding and lead to a more informal attempt. The Institute for Woman and Technology (anitab.org, 2018) began as a meeting between a dozen woman in Princeton where they would discuss two issues- "getting woman into computing and what's being created" (Borg, Oral History: Anita Borg, 2001). Borg campaigned for funding from many companies and was successful, the Institute for Woman and Technology began making progress. Borg, together with Telle Whitney founded the Grace Hopper Celebration of Woman in Computing annual conference to gather woman in computing. The first conference was a large success, the night ended with a hundred turned away due to the venue reaching capacity. The conference continues annually, hosting high level female software engineers. In 2002, Whitney took over the Institute and renamed it the Anita Borg Institute for Woman and Technology. Sadly, Borg was diagnosed with a brain tumour in 199 and passed away in 2003.

Influence.

Numerous scholarships have been named for Borg since her passing, signifying the large impact she has had on the culture of software engineering. For example, in 2004 Google created the Google Anita Borg Memorial Scholarship which recently grew to include woman within the US and abroad (Google, n.d.).

References

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