James Arthur Gosling

Early Life

James A. Gosling was born on the 19th of May 1955, near Calgary, Alberta, Canada. He received a Bachelor of Science degree from the University of Calgary in 1977. In 1983 he received a Ph.D. in Computer Science from Carnegie Mellon University. His Thesis title was "The Algebraic Manipulation of Constraints". [1]

Early Developments

While still at Carnegie Mellon University he wrote his own version of Emacs, a text editor for Unix, called Gosling Emacs or "gmacs". This was the first Emacs in C implementation and was originally free. However, Gosling later sold it to the company UniPress. [2] Gosling Emacs is now obsolete, largely replaced by GNUMACS.

Another impressive feat by Gosling was during his time at CMU he wrote a version of the Unix OS to incorporate hyperthreading so it could run on a multiprocessor computer.

Gosling is also accredited with writing several compilers and mail systems during his time at CMU.

Sun Microsystems

In 1984, Gosling was recruited by the cofounder of Sun Microsystems Andy Bechtolsheim. He began his work there as lead engineer of the NeWS (Network-extensible Windows System) windowing system, formally called SunDew. In the end X-Windows was the preferred windowing system and NeWS was discontinued. Gosling served as Sun's Chief Technology Officer of their products group followed by Chief Technology Officer of their client software group.

Sun was acquired by Oracle in 2010, after which he shortly left. [3]

Liquid Robotics

Gosling began work for Liquid Robotics, a subsidiary of Boeing, in 2011 as Chief Software Architect. In a press release he said, "We'll be able to get a wide variety of detailed data more cheaply and pervasively than any other way." [4] Their aim is to use autonomous robots to gather data on our oceans and change the way we look at them.

Amazon Web Services

In May of 2017 Gosling joined Amazon Web Services as a distinguished engineer. On his LinkedIn he describes his job as "wandering around at Amazon Web Services". Goslings credibility may entice companies to move their data to AWS.

Java

Gosling is best known as "the Father of Java".

In 1991, Gosling joined by Mike Sheridan, Patrick Naughton and Ed Frank began the development of Java, then called "The Green Project". [5] The aim was to develop a virtual machine and a language that had a familiar C-like notation but simpler and easier to use than C/C++. It would be designed to run on other devices such as, televisions, telephones, printers, home appliances and other systems, not just computers.

It was innovative as you could write the code once and then execute the program on multiple operating systems.

It also used the object orientated programming methodology. This means that various data types are combined with their operations into objects. Object orientated programming is useful as the human consciousness, how we understand things and use logic are object orientated.

The Impact of Java

Although the Android operating system is written mostly in C, the Android SDK uses Java for its applications. There is about three billion mobile phones using Java, as well as one hundred and twenty-five million televisions. Java language is continually ranked first in the rankings of software developers as the best choice of programming languages.

The ability to run portable applets in any browser has allowed the web take over many functions of traditional software.

There are currently around nine million Java developers in the world.

Awards

In 2002 he was awarded The Economist Innovation Award.

In 2002 he was awarded The Flame Award USENIX Lifetime Achievement Award.

In 2007 he was made an Officer of the Order of Canada. The Order is Canada's highest civilian honour. Officers are the second highest grade.

In 2013 he became a fellow of the Association for Computing Machinery.

In 2015 he was awarded IEEE John von Neumann Medal

In 2019 he was named a Computer History Museum Fellow for the conception, design, and implementation of the Java programming language.

References
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(5). https://www.computerhistory.org/fellowawards/hall/james-gosling/