

Biography of an influential Software Engineer:

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Linus Torvalds



Early Life:

Born on the 28th of December 1969 in Helsinki, Finland, Linus Torvalds was destined to achieve great things, an early insight into that being that he is named after Linus Pauling, an intelligent American chemist who had also won a Nobel Prize. Although born to two journalists, from an early age it was evident that his main enthusiasm was computers and also the science behind them.

His first experience of a computer system was the Commodore VIC-20 at the young age of 11. The first programming language that he learned was BASIC, a simplistic language that sparked interest in the young boy and thrust him into a highly successful and influential career. It was during these early years that he developed his programming skills and knowledge, allowing him to code several games, an editor and most importantly his own assembler as software was scarce in Finland at the time. (WIRED, 2012)

Influence:

To say Linus Torvalds is an influential figure in the world of computer science is an enormous understatement. It is through the use of his main two projects, Linux and Git, that he has impacted the most, especially through his contribution of “open source” material (Wikipedia, n.d.). A self-proclaimed “geek”, Torvalds has spoken of how he is not much of a “people-person” and prefers to work alone. It was this unique characteristic that motivated him to utilise open source as it reduced the amount of face-to-face human interaction he would have to endure (TED, 2016). His reserved personality allowed him to create and improve software that ironically, used group integration work and ideas to diminish the need for human interaction in the future. He has also created a stepping stone in operating systems through his forging of Linux.

Linux:

The first version of the Linux operating system was released on the 14th of March 1994 (Wikipedia, n.d.). The Linux kernel that Torvalds created is the basis for many operating systems such as in Android phones, cars and supercomputers (Bernstein, 2016). Without such an ingenious piece of software, we would undeniably lack in the functionality and power of the facilities that use such software to enhance them. The Linux kernel started off as a solo project that Torvalds developed himself, further enhanced by suggestions and ideas of other software engineers that took an interest in his work. They would have been denied access to such code had Torvalds not been influenced by Richard Stallman, a free software-guru who made an exhilarating speech in the University of Technology (Wikipedia, n.d.). It was through the use of Stallman’s GNU General Public License that Torvalds developed the Linux kernel. Through the use of another project, Git, Torvalds along with thousands of other engineers maintain the kernel and upgrade it every two months according to Torvalds himself (TED, 2016)

The innovative kernel defined Torvalds as an integral software engineer, possibly one of the most important of the modern era, and also evoked the start of his fame and prestigious career as he accepted jobs in Transmeta and other Silicon Valley based companies (Wikipedia, n.d.).

Git:

Git, the fundamental code maintenance site that receives countless lines of code, views and development projects of aspiring software engineers daily. In my opinion, the leading tool in software development that allows everyone across the world to enhance, administrate and share their own creations. It holds a great stature among the computer science community and has influenced creativity without a doubt. Linus Torvalds is the creator at the centre of this innovative site (Wikipedia, n.d.).

The reason for the development of this massive project was to aid in the enhancement of his other project, Linux. Due to his lack lustre interest in engaging with other engineers, he devised Git based off another code maintenance software, BitKeeper (Wikipedia, n.d.). This successful project allowed him to receive improvements and criticisms on his work and also shape the way in which the modern era of software engineering completes and maintains projects itself. Without such a creation, we possibly would not have the facilities that we do at the touch of our fingertips.

Personal Opinion:

It is in my own opinion that I fully believe Linus Torvalds is one of the most influential, diligent and inspiring software engineers of computer science as a whole. Through the development of the previously mentioned projects, he has produced a key function in software engineering and shaped the way in which we, as users, can complete our work. Without his enduring appetite and stubbornness to accomplish his goals, we would lack in crucial areas of software development as he has built a basis for future engineers to build on. The Android and other similar operating systems would not be what they are today, missing a decisive piece in the puzzle that is software development.

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