



LINUS TORVALDS BIOGRAPHY

Gabriel Barat

ABSTRACT

Biography of Linus Torvalds a Finnish-American Software Engineer credited as being the principal developer of the Linux kernel and the Git systems.

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Software Engineering Biography

Childhood

One of the most influential software engineers of our time Linus Benedict Torvalds was born on 28 December 1969 in Helsinki Finland. While Linus himself later on life became a software engineer, it seems that this passion did not come from within the immediate family as most of them were involved mostly in journalism. His father a Communist was involved with radio journalism, while his mother worked for a Finnish newspaper as a translator and a creator of new graphics.

While his parents seem to have divorced when Linus was still quite young, he still had a happy and conventional childhood with his mother and her grandparents. While with them it looks like Linus's grandfather on his maternal side had the biggest influence on Linus as a child. His grandfather Leo Toergvist was a professor of statistics at the University of Helsinki and it seems that he sparked the passion of mathematics and programming in Linus. He did this by funnily enough by bringing home an old personal computer, the Commodore Vic 20 which Linus seems to have been interested in initially. However Linus soon became bored of the limited applications on the old Commodore and started making his own using BASIC the programming language and later on assembly language!

Start of Career

Between the years of 1988 to 1996 studied at the University of Helsinki where he managed to obtain his masters degree in Computer Science. While there he was also part of the Nodes Research group which describes itself as [The NODES research interests range from the effective organisation of Internet protocols and wireless communication to the new challenges of globally interoperating business services.](#) .

However while in university Linus seems to have also had to join the Finnish army for eleven months to abide by the Finnish law of compulsory military service at the time. Funnily enough even though this was most likely against his wishes he still reached the rank of second lieutenant while serving there. However once he finished in 1990 he went back to university and it seems that during this time he got acquainted with the operating system Unix, which he thought was much better than MS-DOS from Microsoft. However over time he thought that improvements could be made even to this and thus started working on Linux.

Linux

Linus originally started to work on the kernel Linux when he has frustrated by the limitations of other operating systems around at the time. MS-DOS which was most accessible was too restrictive for Linus while Unix which Linus preferred and had been using on university computers was way too expensive for him costing at least 5000 US dollars. He also tried to use Minix a version of Unix used to teach college students Unix, however again this was too restrictive for him or was missing features.

So on 25 August 1991 he announced his initial creation of Linux with the following message on a newsgroup he was part of.

Message-ID: 1991Aug25.205708.9541@klaava.helsinki.fi
From: torvalds@klaava.helsinki.fi (Linus Benedict Torvalds)
To: Newsgroups: comp.os.minix
Subject: What would you like to see most in minix?
Summary: small poll for my new operating system

Hello everybody out there using minix-

I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386 (486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system due to practical reasons)among other things.

I've currently ported bash (1.08) an gcc (1.40), and things seem to work. This implies that i'll get something practical within a few months, and I'd like to know what features most people want.

Any suggestions are welcome, but I won't promise I'll implement them :-)

Linus Torvalds torvalds@kruuna.helsinki.fi

He released the first crude version of Linux on 17 September 1991 and then the first official version on 5 October 1991. The main point about this system was that it had the ability to run two main but very important system utilities the bash shell and GCC. Most importantly as well, the kernel was also released under a General Public License which meant that anyone could get the code for it, study the code, modify the code and even release new versions of it. Due to this many enthusiastic programmers of the day were excited about this new kernel "Linux" and decided to help Linus with his creation which most likely is the reason why Linux is so big to this day!

Linux continued to grow with its ups and downs. Many new features and updates were being added regularly such as the ext2 file system in 1994 which gave Linux a large increase in speed. However there were also complaints about Linux such as the ability to only run x86 chips. However as time passed Linux was started to be recognised as more and more proper and powerful system by its competitor Microsoft. Many companies such as Oracle and Intel started to get involved as well but the icing on the cake was when IBM decided to donate one billion dollars to the research of Linux.

Linux ended up having many advantages over competitors. It was virtually free to use for most versions, very stable, less prone to viruses, less likely to slow down unlike other OS, had much more customization and access to a lot of free software.

All of this had a massive impact on the world of programmers and computers in general. Firstly it looks like Linux has really pushed forward the concept of open source, since it was one of the first kernels to be openly available to the public to view and work on. This has sparked more enthusiasm in the open source platforms meaning that Linux may probably be one of the main reasons so much free software is available now. Secondly Linux most certainly has heavily influenced a lot of different operating systems such as Windows OS and Mac OS, which have copied some features of Linux such as 3D Desktop virtualization. Furthermore many different systems such as Android, ChromeOs and Smart TV OS are all based on Linux, meaning we can thank Linux partly for phenomenon such as the Dog Filter on Snapchat and Candy Crush Saga. But finally we can also thank Linux for how smooth we search the web today as well as many websites are run off Linux, while most supercomputers also run off of Linux.

While all these achievements are linked to Linux and not to Linus Torvalds himself we still cannot forget how he started all this off! He started off by releasing its first official version and then its 2.0 version, putting in countless amounts of code and time while also promoting the kernel to many different people and organisations. Thus his title as the principal force behind Linux is appropriately chosen.

Later Life

During this period of time Linus also had a few events happen in his personal life. One of these events is especially interesting (well maybe at least for some people!) and that is how he met his wife. While Linus became a professor at the University of Helsinki due to his exemplary efforts on Linux he came upon a class where he gave them the task of emailing him as an assignment. Funnily enough one of the students took a liking to Linus and actually asked him out on a date to which he accepted. Three years down the line the first of their three daughters was born.

A big change however hit Linus again in the year of 1997 when he decided to finally move from his original home in Helsinki and change location to Santa Clara in California USA near the fabled Silicon Valley to accept a position with Transmeta Corporation due to a better living and a bigger range of opportunities as believe it or not even though Linus had had such success with Linux by this point, he still only made a basic programmer salary. However in 1999 Linus hit upon a bit of good fortune when Red Hat and VA Linux both leading developers of Linux offered him some stock options in regards to his astounding work on Linux. This worked in his favour as his net worth soared up to roughly 20 million dollars when VA Linux went public and its stock options skyrocketed.

Nowadays Linus is still working on Linux full time for Open Source Development Lab which is based in Oregon. While Linus has only written about 2 percent of the actual kernel himself, he still makes all the big decisions on its development and owns the trademark.



References

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