Linus Torvalds – Biography

I have chosen to write about Linus Torvalds, the man who created the Linux Kernel, currently overseas the development of the Linux Operating System and the developer of the revision control system, Git.

Early Life

He was born in Helsinki, Finland on December 28th, 1969. His parents, Nils and Ana Torvalds, divorced when he was young and Linus, along with his younger sister Sara, was raised by his mother and his maternal grandparents. It was in fact his grandfather, a math and statistics professor, who first introduced him to computers. He owned a Commodore VIC-20 which he essentially used as a calculator, however a young Linus could see it had a lot more potential and began reading manuals and looking at code samples for simple games on the machine. It was on this machine where he wrote his first lines of code. His first program was wrote in BASIC, he wrote a program which infinitely printed "SARA IS THE BEST" on the screen which he proudly showed his sister. In Torvalds biography he states that while he was the stereotypical nerd in school, he never had any trouble regarding bullying as everyone "cared about their own problems a whole lot more" than picking fun at the Linus. He found school easy yet never got exceptional grades as he never really tried. Linus describes the only social event on his calendar was a weekly meeting with a boy in his class who also enjoyed computers.

"three people in class with computers and only one of them uses it for the same reasons. You hold weekly meetings. It's the only social activity on the calendar, except for the occasional computer sleepover." – Just for Fun, Linus Torvalds Biography.

Development of the Linux kernel

In 1988 Linus enrolled in the University of Helsinki with Computer Science as his chosen major. Torvalds ended up spending 8 years in college for "nothing more than a mere master's degree". It was here where he "learned the

difference between a pilsner and an ale" but also where he began developing the Linux kernel. Linus originally wanted to purchase a Unix machine, however he could not afford it and he was unhappy with the other operating systems available such as MINIX and MS-DOS so Linus decided to write his own. He began analysing the MINIX OS and added a terminal emulator which then evolved to adding a new file system. 6 months later he posted on an internet forum stating that he began working on a free OS, originally named "Freax", and that he was looking for suggestions of what people liked and disliked about it. This was the beginning of the collaboration and sense of community that is associated with Linux today. In September of 1991 the name was changed to Linux by a volunteer admin, Ari Lemke, in the University of Helsinki without Linus permission, however evidently that name stuck. Lemke allowed Torvalds to host his operating system on the college servers so anyone could download and use it. Over the next few years the Linux OS was gaining popularity in the small corners of the internet with people adding code with Linus approval, quickly it became the largest open source project ever. Eventually companies began to take interest and on March 14, 1994 Version 1.0, the first fully functioning Linux OS, was released. Torvalds used a college auditorium to make this announcement, it even brought in the national Finish TV to record the event. Version 1.0 was never very challenging to any of the big players such as Microsoft, however it had a dedicated community behind it. Torvalds began giving interviews to newspapers, tech magazines and even with huge companies enquiring about this new and most importantly free software. Torvalds even had a fan page dedicated to him.

"Then there were the fan websites that started popping up, such as the one based in France that primarily consists of a much-updated gallery of embarrassing photos of me. Like the one of me from a Spektrum meeting: I'm shirtless, drinking a beer, looking studly." – Just for Fun, Linus Torvalds Biography.

Move to America

In 1996 while finishing his masters with his paper "Linux: A Portable Operating System" Linus received an email from Peter Anvin, a member of the Linux newsgroup, offering him a job in Transmeta, California. So, Linus visited

California to see how American life would suit them and to see what Transmeta was all about. After receiving five job offers while in America, from companies such as Red Hat, Linus stuck with Transmeta as he found them "Exciting". Linus then returned to Helsinki to finish his thesis and tell the college he would be leaving. 40 hours after handing in his Thesis his first child was born, Patricia Torvalds. The Torvalds family then moved to America, despite having a "healthy" salary Linus says his family just got by for the first few months and then lived quite comfortably. It wasn't until 1999 when both Red Hat and Linux VA went public the Linus net worth really skyrocket, he had considerable shares in both companies' worth over $21.5 million. He claims he was "the luckiest bastard alive". Linux worked in Transmeta for 7 years and went on to have two more children Celeste and Daniela. Linus and his family then moved to Oregon where Open Source Development Labs, his new employer, was located. OSDL was a non-profit organization supported by a global consortium tasked to "accelerate the deployment of Linux for enterprise computing.

"I lived in Silicon Valley for 7 years, and I worked for the same company for the whole time…that's not how Silicon Valley works" – Linus in a Ted Talk regarding his stubbornness.

Development of Git

Linux development continued and was aided by a version control system called Bit keeper, however in 2005 this company stopped being a free software. This made Linus decide to create his own version control system called, Git. The development of Git began on April 7th, 2005. Git is of course an Open Source and was heavily inspired by Bit Keeper. Torvalds began using Git to commit to itself locally a mere two days after he began the project and once it was released to the Linux Kernel Git immediately became a hit in the software development world. This was mainly because it eliminated some of the main problems that the current VCSs were having such as renaming files and speed. Git now has over 500,000 commits by over 1000 users. Git inspired many other companies but the most famous one was Github, which was created in 2007, this gave users a

platform to host their local Git repositories online. Unlike Linux, Torvalds handed over the maintenance of Git to a major contributor named Junio Hamano.

Current Endeavours

Linus now works in the Linux Foundation, which was a merger of OSDL and Free Standards Group. Linus now maintains Linux full time along with 150 other employees and the open source community. He is also a very popular Keynote speaker at tech conferences and gives occasional interviews to tech magazines and news websites. In 2011, Linus released a piece of software for logging and planning scuba dives. His three daughters are all in college and they all still live in Oregon. Torvalds has a net worth of $150 million and an annual salary of $10 million. Linus says he has no intention of stopping maintaining Linux any time soon.

Impact and Recognition

Since 2005, 5,600 developers from more than 1,400 companies have contributed to the Linux kernel. It is now more than 15 million lines of code. It is used in all android devices which is roughly 1.5 billion. Linux platforms are currently powering the majority of the Web today, which means Torvalds legacy will last for a considerable time. Linux also serves as the primary operating system for over 90% of the world's 500 most powerful supercomputers, such as CERN and The New York Stock Exchange, this is according to the Top 500 Project. Linus is also the recipient of the 2014 IEEE Computer Society Computer Pioneer Award, the 2018 IEEE Masaru Ibuka Consumer Electronics Award and he was 17th in the Time 100: The Most Important People of the Century poll.

"A computer is like air conditioning – it becomes useless when open Windows"
– Linus Torvalds