

# Universo Linux

Maciel Calebe Vidal

[macielcv@insper.edu.br](mailto:macielcv@insper.edu.br)

# O que é um computador?

- Tente pensar do ponto de vista de um engenheiro!

# Década de 60

- Cada máquina era única



<https://upload.wikimedia.org/wikipedia/commons/5/52/Pdp7-oslo-2005.jpeg>

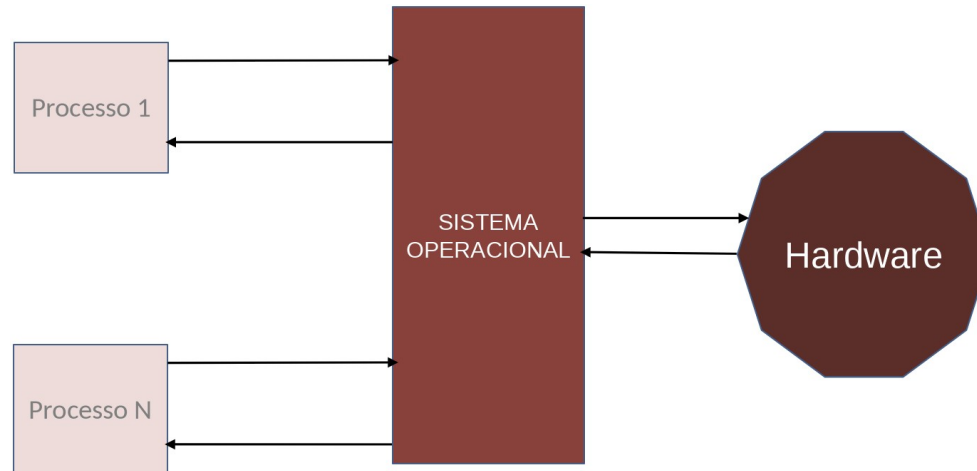
# Sistema Operacional

- O que é?

# Sistema Operacional

- O que é?

“Permitir que usuários executem diversos programas de maneira **simultânea e segura.**”



# Unix

- Assembly vs Linguagem C

```
MAN(1)                                NetBSD General Commands Manual                                MAN(1)
NAME
  man - display the on-line manual pages (aka ``man pages'')
SYNOPSIS
  man [-acw|-h] [-C file] [-M path] [-m path] [-S srch] [[-s] section] name
  man [-k] [-C file] [-M path] [-m path] keyword ...
DESCRIPTION
  The man utility displays the BSD man pages entitled name.
  The options are as follows:
  -a      Display all of the man pages for a specified section and name
          combination. (Normally, only the first man page found is displayed.)
  -C      Use the specified file instead of the default configuration file.
          This permits users to configure their own man environment. See
          man.conf(5) for a description of the contents of this file.
/usr/share/man/cat1/man 0 20%
```

<https://pt.wikipedia.org/wiki/Unix#/media/Ficheiro:Man-man.png>

1969

1971 to 1973

1974 to 1975

1978

1979

1980

1981

1982

1983

1984

1985

1986

1987

1988

1989

1990

1991

1992

1993

1994

1995

1996

1997

1998

1999

2000

2001 to 2002

2003

2004

2005 to 2007

2008 to 2009

2010

2011 to 2018

2019 to 2023

1969

1971 to 1973

1974 to 1975

1978

1979

1980

1981

1982

1983

1984

1985

1986

1987

1988

1989

1990

1991

1992

1993

1994

1995

1996

1997

1998

1999

2000

2001 to 2002

2003

2004

2005 to 2007

2008 to 2009

2010

2011 to 2018

2019 to 2023

Unix-like systems

Open source

Mixed/shared source

Closed source

Unnamed PDP-7 operating system

Unix Version 1 to 4

Unix Version 5 to 6

Unix Version 7

BSD 1.0 to 2.0

BSD 3.0 to 4.1

BSD 4.2

BSD 4.3

BSD 4.3 Tahoe

BSD 4.3 Reno

BSD Net/1

BSD 4.4-Lite & Lite Release 2

NetBSD 0.8 to 1.0

NetBSD 1.1 to 1.2

NetBSD 1.3

NetBSD 1.4 to 9.x

DragonFly BSD 1.0 to 6.4

FreeBSD 1.0 to 2.2.x

FreeBSD 3.0 to 3.2

FreeBSD 3.3 to 4.x

FreeBSD 5.0 to 13.x

Mac OS X Server

Mac OS X, OS X, macOS 10.x to 13.x (Darwin 1.2.1 to 22)

NexSTEP OpenSTEP 1.0 to 4.2

Linux 0.0.1 To 0.9

Linux 2.0 to 6.x

Minix 1.x

Minix 2.x

Minix 3.1.0 to 3.4.0

SunOS 1 to 1.1

SunOS 1.2 to 3.0

SunOS 4

OpenBSD 1.0 to 2.2

OpenBSD 2.3 to 7.2

AIX 1.0

AIX 3.0 to 7.3

Xenix 1.0 to 2.3

Xenix 3.0

SCO Xenix

SCO Xenix V/286

SCO Xenix V/386

SCO Xenix V/386

SCO UNIX 3.2.4

OpenServer 5.0 to 5.04

OpenServer 5.0.5 to 5.0.7

OpenServer 6.x

System III

System V R1 to R2

System V R3

System V R4

UnixWare 1.x to 2.x (System V R4.2)

UnixWare 7.x (System V R5)

Solaris 2.1 to 9

Solaris 10

Solaris 11.0 to 11.4

OpenSolaris & derivatives (Illumos, etc.)

HP-UX 1.0 to 1.2

HP-UX 2.0 to 3.0

HP-UX 6 to 11.10

HP-UX 11i v1 to 11i v3

# Linux



**Linus Benedict Torvalds**



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

Linus ([torvalds@kruuna.helsinki.fi](mailto:torvalds@kruuna.helsinki.fi))

PS. Yes - it's free of any minix code, and it has a multi-threaded fs. It is NOT protable (uses 386 task switching etc), and it probably never will support anything other than AT-harddisks, as that's all I have :-).



Imagens:

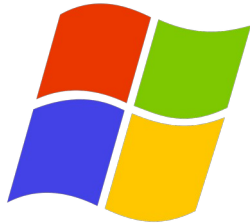
<https://fossbytes.com/wp-content/uploads/2016/08/linus-torvald-first-linux-email.png>

[https://upload.wikimedia.org/wikipedia/commons/thumb/6/69/Linus\\_Torvalds.jpeg/440px-Linus\\_Torvalds.jpeg](https://upload.wikimedia.org/wikipedia/commons/thumb/6/69/Linus_Torvalds.jpeg/440px-Linus_Torvalds.jpeg)



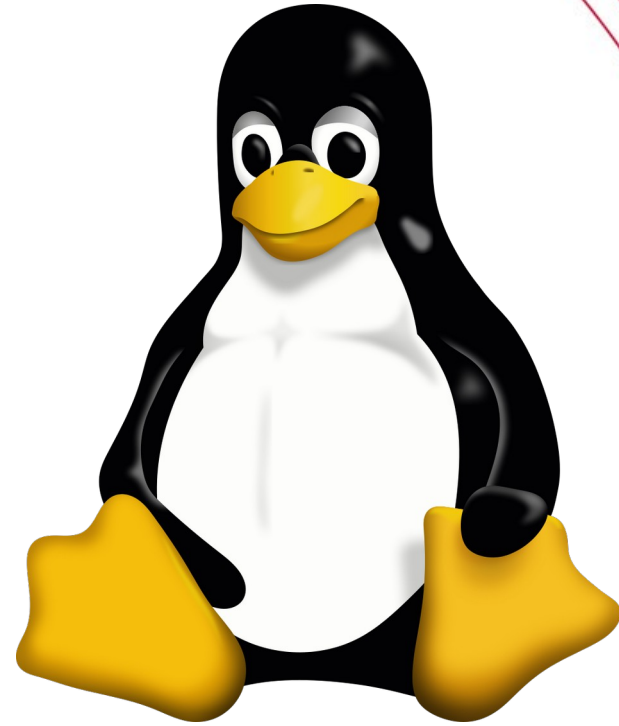
# Sistemas operacionais

- Alguns exemplos:



# Linux

- 2.09% do mercado de Desktops
- 47% devs usam linux
- 90% da nuvem
- 96.3% dos top um milhão de web servers
- 85% dos smartphones
- Todos os top500 supercomputadores
- 600+ distribuições (debian, redhat, arch)



<https://pt.wikipedia.org/wiki/Ficheiro:Tux.svg>

# Acesse a página do curso!



<https://insper.github.io/universo-linux/>

# Rerefências

- <https://en.wikipedia.org/wiki/PDP-7>
- <https://pt.wikipedia.org/wiki/Unix>
- <https://pt.wikipedia.org/wiki/Linux>
- <https://fossbytes.com/linus-torvaldss-famous-email-first-linux-announcement/>
- <https://truelist.co/blog/linux-statistics/>