

EVE 231: Principles of Biological Data Analysis (Fall 2019)

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Outline

UNIX

Early History

- ▶ 1969. Ken Thompson, Dennis Ritchie and others started developing UNIX on the "little-used PDP-7 in a corner" at Bell Labs



- ▶ 1985. Free Software Foundation (GNU) founded by Richard Stallman
- ▶ 1988. Portable Operating System Interface (POSIX) standards for UNIX introduced

Early History (cont)

- ▶ 1988 Free Software Foundation creates Copyleft Licence GNU General Public License (GNU GPL)
- ▶ GPL guarantees end users the freedom to run, study, share and modify the software
- ▶ GNU = “GNUs Not Unix” software is developed by the FSF and includes GCC compiler, Emacs and others

Recent History

- ▶ 1991. Linus Torvalds completes first Linux kernel.



- ▶ 1992/1993 GNU software embedded into Linux to create GNU/Linux
- ▶ 1994 Slackware Linux distribution released
- ▶ 2000 Mac OS X public beta "Kodiak" released

UNIX Philosophy

- ▶ Write programs that do one thing and do it well
- ▶ Write programs to work together
- ▶ Write programs to handle text streams, because that is a universal interface