Emacs Basics ...

History of Emacs

- Originally grew out of the ITS operating system in 1976 at MIT
- Modern Emacs dates from 1984 with the GNU project to reimplement UNIX
- Like Vi, it predates modern GUIs and uses different terminology from both Vi and modern applications



Emacs Philosophy

- Endlessly customizable
- Non-modal editing
 - No normal, insert, or visual modes
 - All keybindings work the same, all the time
- All-encompassing
 - Vim is intended as a small tool as part of a workflow involving Bash and shell commands
 - Emacs wants you to stay in Emacs
 - The continuation of the Symbolics Lisp Machine

Emacs and Vim as languages, and as platforms

- Think of Vim and Emacs keybindings as languages for manipulating text
 - Many text editors implement Vim and Emacs keybindings as an extension
 - Vim and Emacs have extensions that implement each other
- Also think of them as platforms for building editors
 - How configurable an editor is can be as important as the default editing experience

Emacs is not a Unix program

- The original developers of Emacs were Lisp and AI hackers
- The original developers of Unix were C programmers
 - Actually, C and UNIX were quite literally written for each other
- This is one reason why the Emacs/Vi tension exists

Editing with Emacs

Movement

- C-f, C-b, C-n, C-p
 - Arrow key equivalents
- M-f, M-b, Operate on words instead of characters
- C-a, C-e
 - Start and end of lines
- M-<, M-> start and end of file

Editing

- Many Vi commands are unnecessary because you're "already" in insert mode
- C-d (delete next character)
- C-k (delete to newline)
- C-o (open new line above)
- C-x u (undo last change)

Repetition

Many commands take a "universal argument" using C-u

C-u 5 C-n

Moves forward 5 lines

Copy / Paste

- Emacs lacks visual mode, but the basic copy / paste acts very similar
- C-Space (set mark)
- C-y (paste)
- C-w (cut)
- M-w (copy)

Search / replace

- C-s (Search forward)
- C-r (Search backward)
- M-x replace-string (replace text)
 - o Doesn't confirm
- M-% (replace text)
 - Needs confirmation

Files

- All under the C-x menu
- C-x C-c (exit)
- C-x C-f (find / open)
- C-x C-s (save)

Why Emacs?

- Both Vi and Emacs have steep learning curves, but Emacs has a higher ceiling
- The clunkiness of Emacs editing commands can be worked around through customization
 - I typically run a Vim emulator inside of Emacs to use elegant Vim commands with powerful Emacs extensions
- It's (almost) everywhere