

Atreus, i3, and Vim

An overview of mechanical keyboards and optimizing workflow

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Hi, I'm Loren

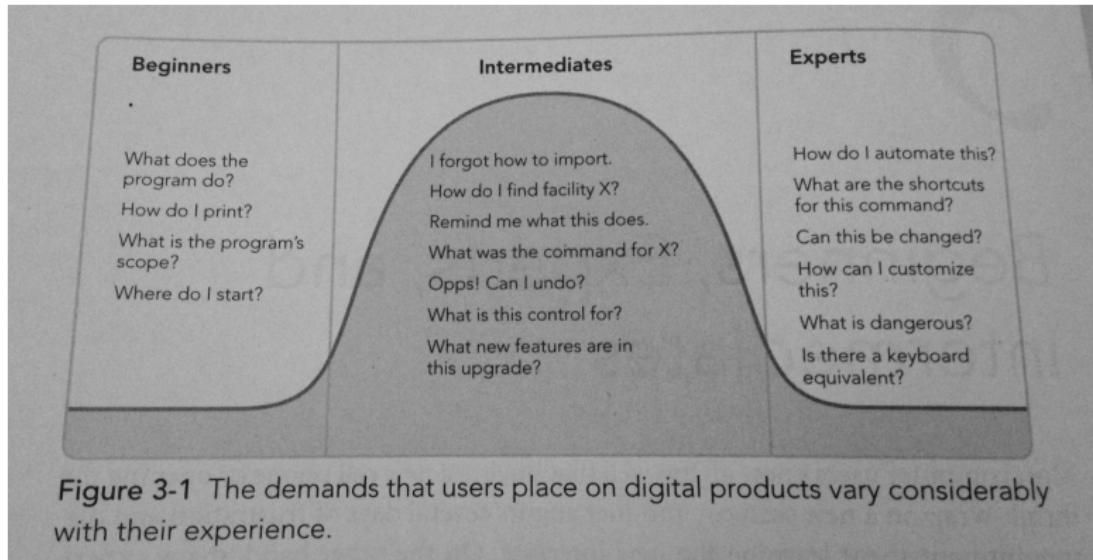
- ▶ I'm a UX designer at EMC
- ▶ Twitter: @lorentrogers
- ▶ Presentation built with \LaTeX , available on Github.

The End-Goal

```
1   .section-content
2   {# for post in site.posts %}
3   {% if post.categories contains 'portfolio' %}
4   %p
5   <u>{{ post.title }}</u>
6   {% endunless %}
7   {% endif %}
8   {% endfor %}
9
10  .section-wrapper
11  <h2>{{ section_header }}</h2>
12  .section-content
13  {# for post in site.posts %}
14  {% if post.tags contains 'writing' %}
15  %p
16  <u>{{ post.title }}</u>
17  {% endif %}
```

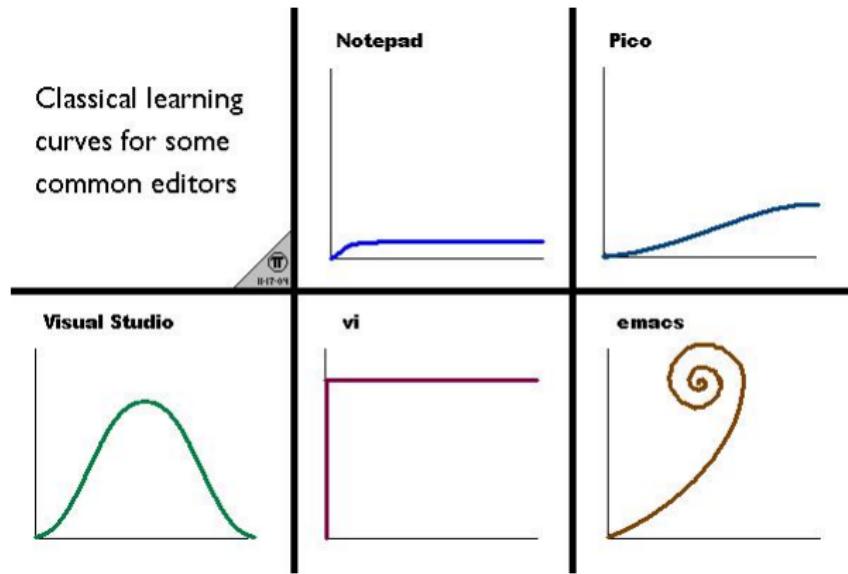
- ▶ Investment in a good set of tools
- ▶ Looking outside of Vim
- ▶ Ecosystem

Design Perspective



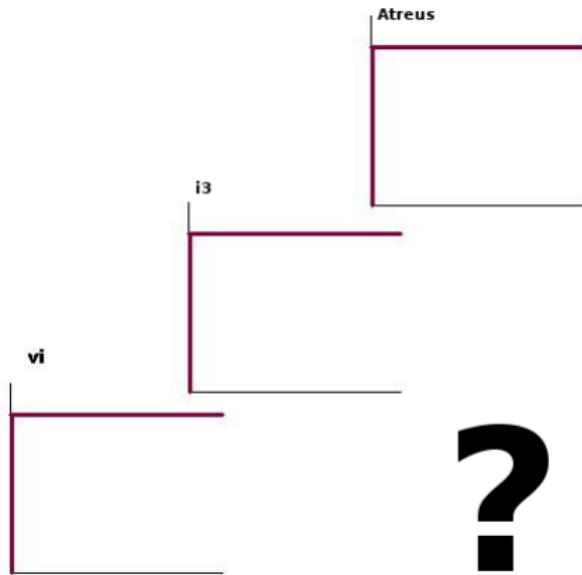
- ▶ We're going for expert: intuition be damned.
- ▶ Use the same patterns as much as possible across platforms.
- ▶ Keep information in the mind, rather than in the world.

We Know Vim is Awesome



- ▶ What else can we do?

Some Other Options?



?

i3wm

- ▶ Tiling window manager
- ▶ Focus on configuration, simplicity, speed
- ▶ Awesome.



i3wm Configuration

```
101 # move focused window
102 bindsym $mod+Shift+j move left
103 bindsym $mod+Shift+k move down
104 bindsym $mod+Shift+l move up
105 bindsym $mod+Shift+semicolon move right
106
107 # alternatively, you can use the cursor keys:
108 bindsym $mod+Shift+Left move left
109 bindsym $mod+Shift+Down move down
110 bindsym $mod+Shift+Up move up
111 bindsym $mod+Shift+Right move right
112
113 # split in horizontal orientation
114 #bindsym $mod+h split h
115
116 # split in vertical orientation
117 bindsym $mod+v split v
118
```

i3wm Configuration

```
41
42 # Open internet shortcuts
43 bindsym $mod+i exec iceweasel
44 bindsym $mod+Shift+i exec chromium
45
46 # Open eMail shortcut
47 bindsym $mod+m exec icedove
48
49 # Open screenshooter
50 bindsym $mod+c exec xfce4-screenshooter
51
```

i3wm Configuration

```
--  
23 # Bind lock screen  
24 bindsym $mod+q exec i3lock -c 333333  
25  
26 # Set laptop brightness  
27 bind 232 exec xbacklight -dec 10  
28 bind 233 exec xbacklight -inc 10  
29 bind 122 exec amixer sset Master 5%-  
30 bind 123 exec amixer sset Master 5%+  
31  
32 # Rebind the focus directions to match vim  
33 bindsym $mod+h focus left  
34 bindsym $mod+j focus down  
35 bindsym $mod+k focus up  
36 bindsym $mod+l focus right  
37
```

Why i3 Rules

- ▶ Very quick access to common functions (new term, browser, email)
- ▶ Open apps by name, not icon
- ▶ Really easy to customize / integrate w/ vim, tmux, keyboard
- ▶ Many desktops help keep you organized

Keyboard

Your setup matters!



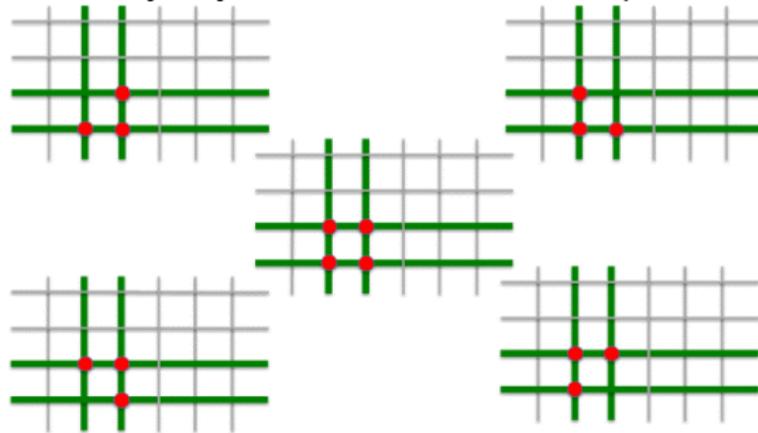
Mechanical Keyboards

Why should I care?

- ▶ Comfort: mechanical vs dome membrane
- ▶ Speed & combinations
- ▶ Layout ergonomics

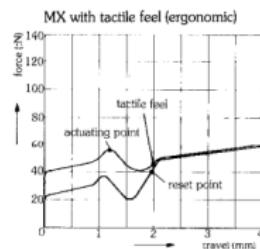
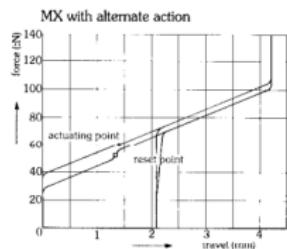
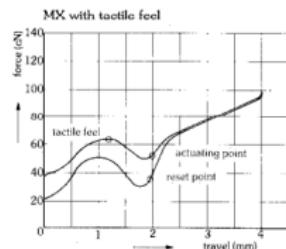
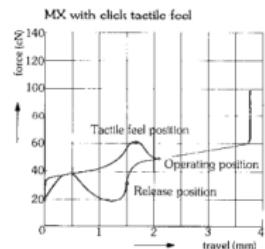
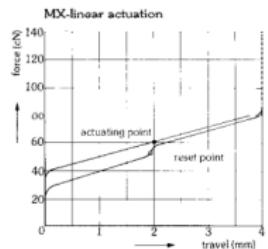
Speed and Options

On many keyboards, these are all equivalent keystrokes!

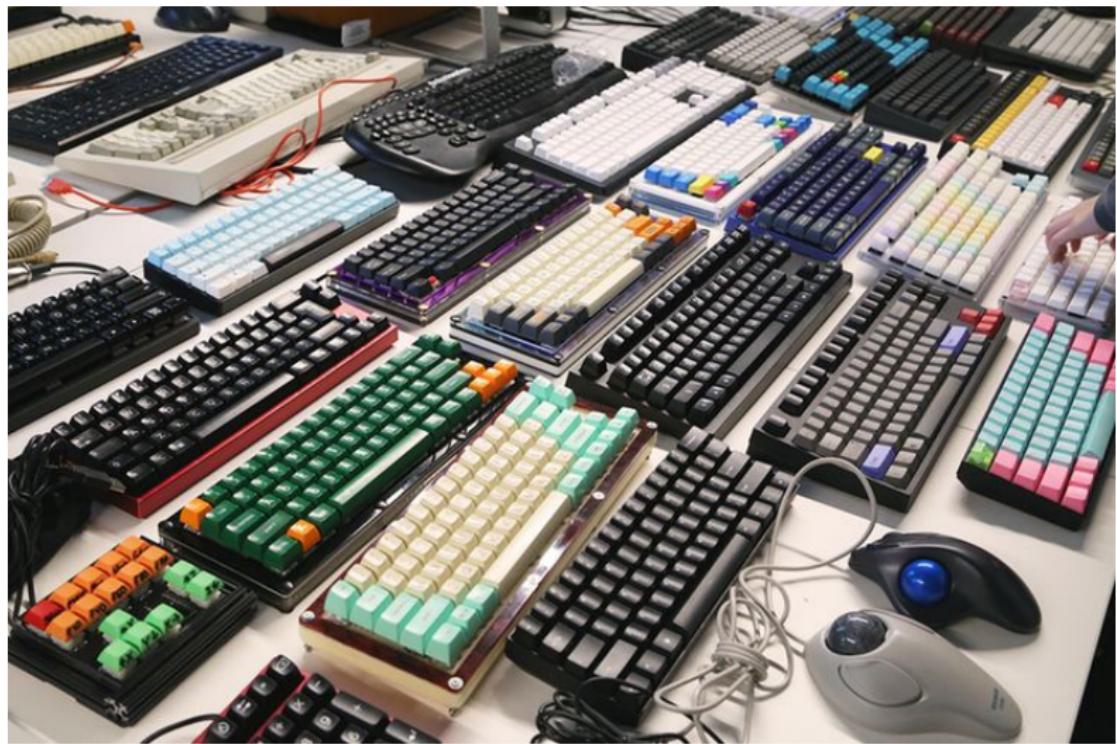


Actuation

Force/Travel Diagram



Layouts

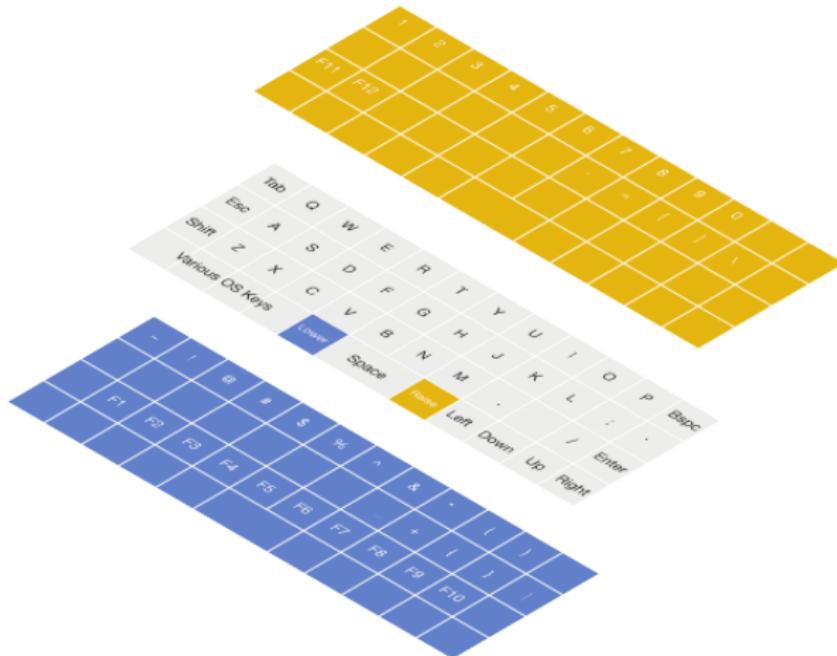


Layouts



<https://www.massdrop.com/article/kiibohd-16-mech-meetup-md>

Keymaps



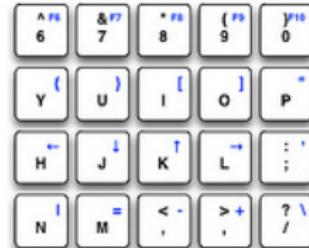
Planck

Keymaps



Atomic

Keymaps



Ergodox

Atreus



Atreus

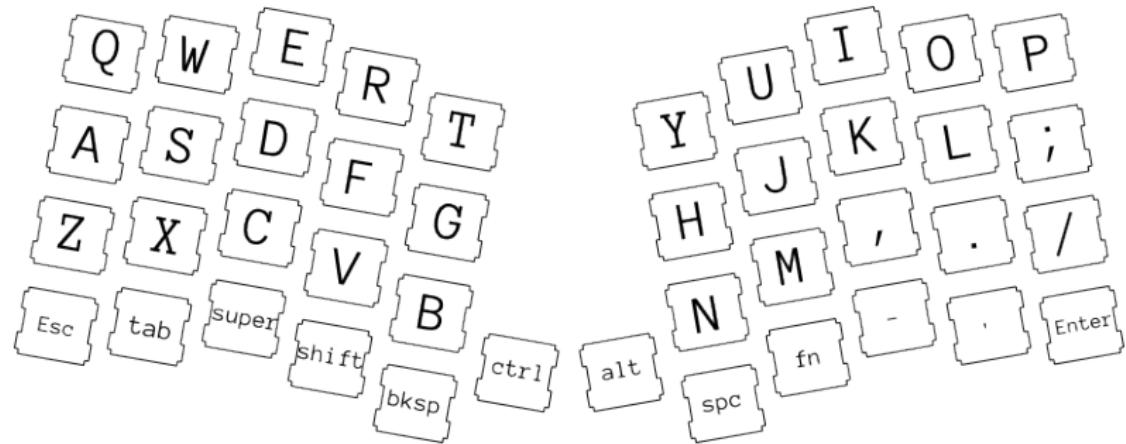


Atreus

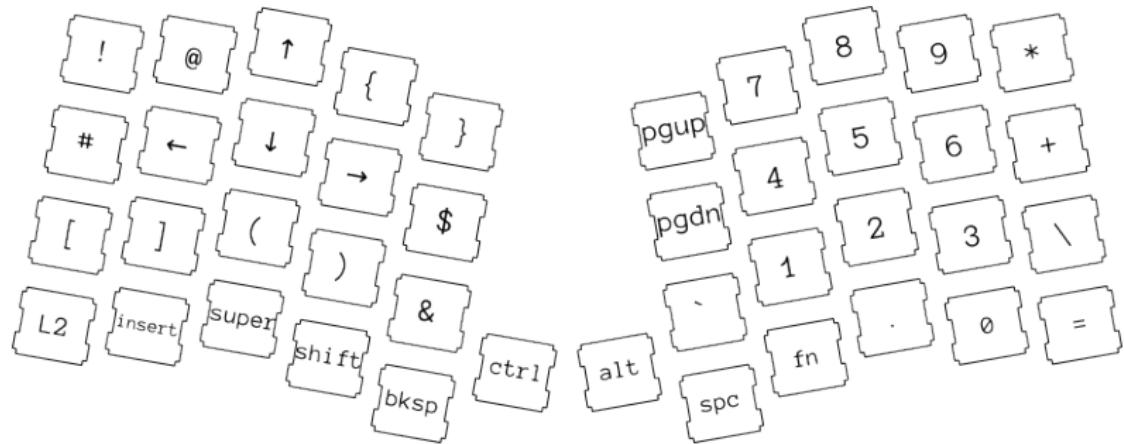
Why I chose this specific keyboard:

- ▶ Open source
- ▶ Portable
- ▶ Customizable
- ▶ Column layout (also called ortholinear)
- ▶ Layered firmware

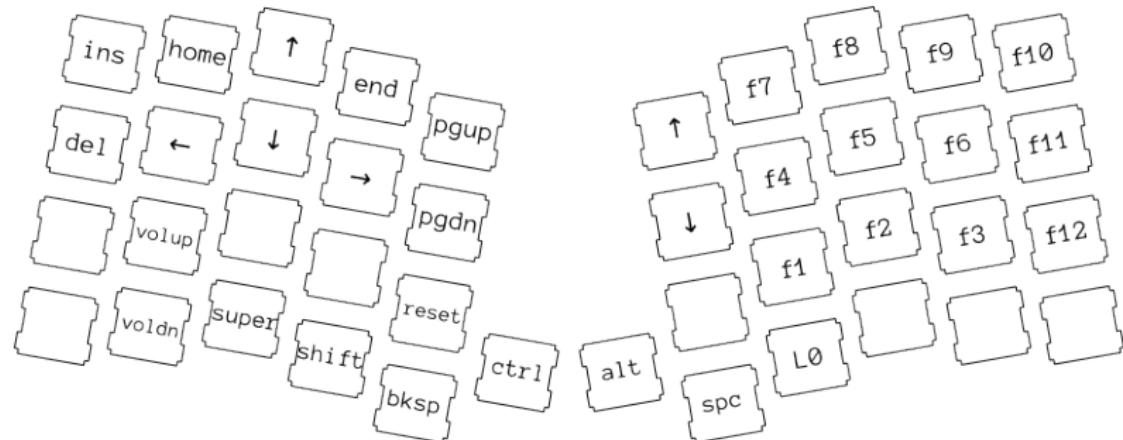
Atreus: Layer 1



Atreus: Layer 2



Atreus: Layer 3



Open Source

Project info:

- ▶ Available on Github: github.com/technomancy/atreus
- ▶ Project site: <http://atreus.technomancy.us/>

Containing:

- ▶ PCB Files
- ▶ Laser Cutting Templates
- ▶ Part List
- ▶ Firmware

Thanks!

- @lorentrogers