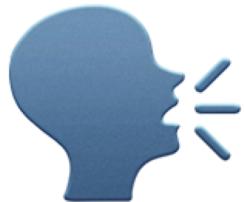


# Voice Driven Development



# whois emily

- GitHub: @2shea
- Twitter: @yomilly
- I write code for Fastly





We help developers make fast, secure and reliable digital experiences happen by processing and serving customers' applications at the edge, as close to end-users as possible.

I write Perl... by voice

**But... Why??**

# RSI

(Repetitive Strain Injury)



# First I tried...

- Taking breaks
- Wrist braces at night
- Anti-inflammatories
- Occupational/Physical Therapy
- Massage

# Then I tried...

- Acupuncture
- Chiropractor
- Pain creams
- Yoga/Stretching
- And More...



# Ergonomics



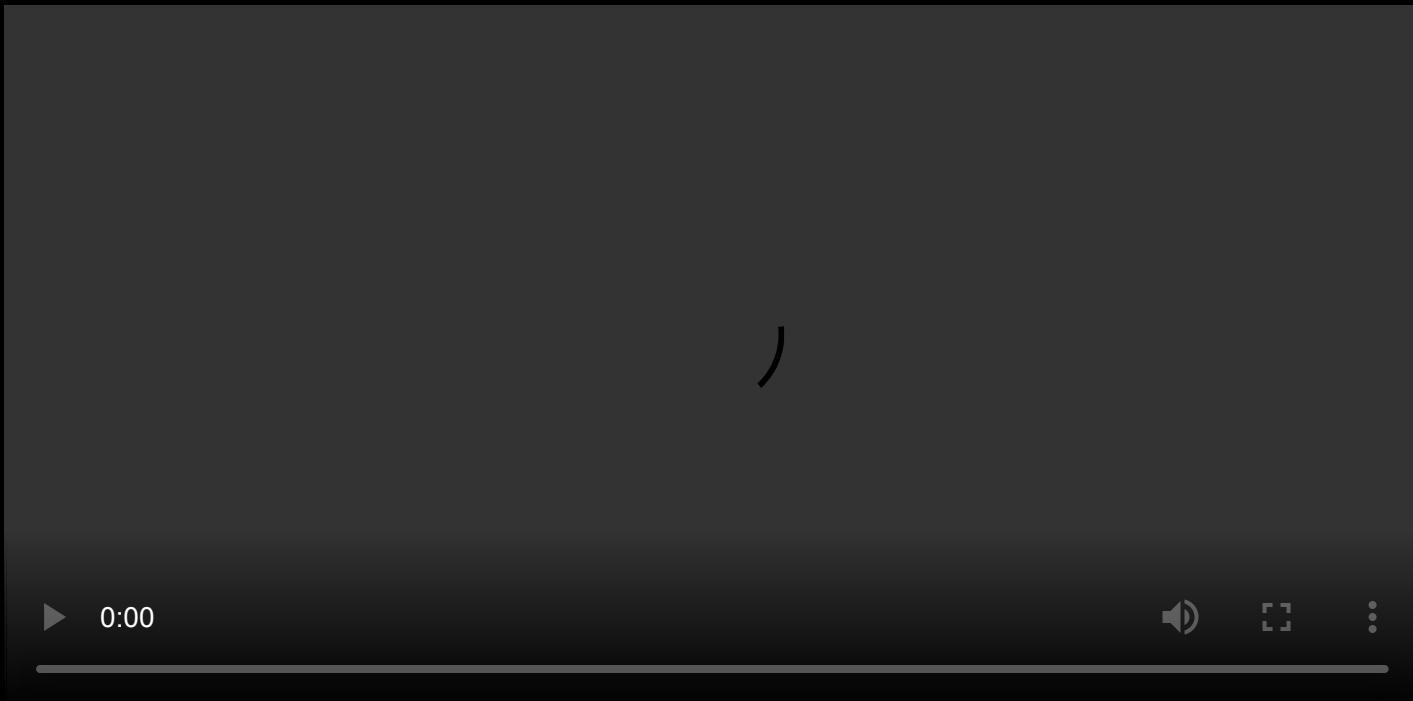
**THIS**

**IS MY SAD FACE**

quickmeme.com

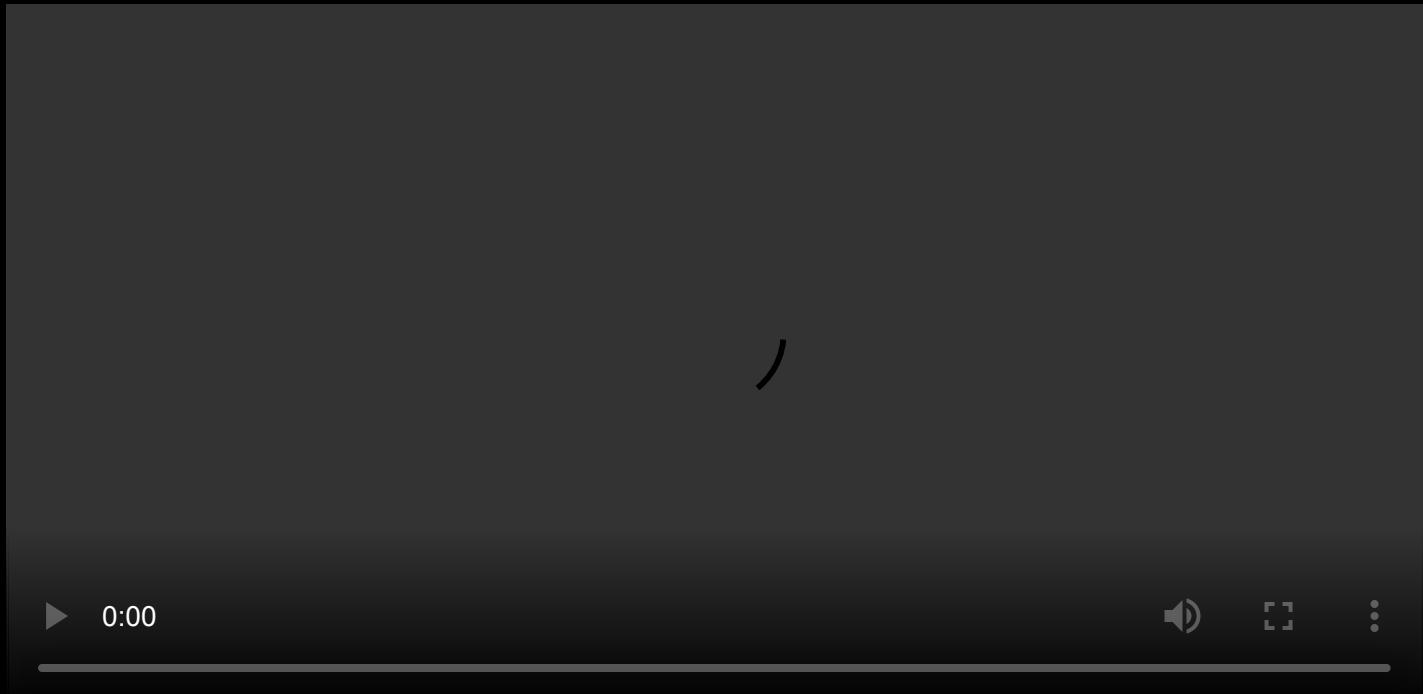
# Voice??

I was expecting writing perl by voice to go something like this...



Source: <https://youtu.be/MzJoCytAsec>

But it actually works like...



# The Tech

Microphone



Talon



Dragon Dictation



# What Is Talon?

- Hands-free input
- Uses Dragon Dictation API
- Programmatically configured with Python
- Free!
- <https://www.patreon.com/lunixbochs>

**But... How??**

**Let's start with the basics...**

Air Bat Cap Dip Each Far Gone Harp slt Jury  
Krunch Look Mad Near Odd Pit Quench Red Sun  
Trap Urge Vest Whale pleX Yank Zip

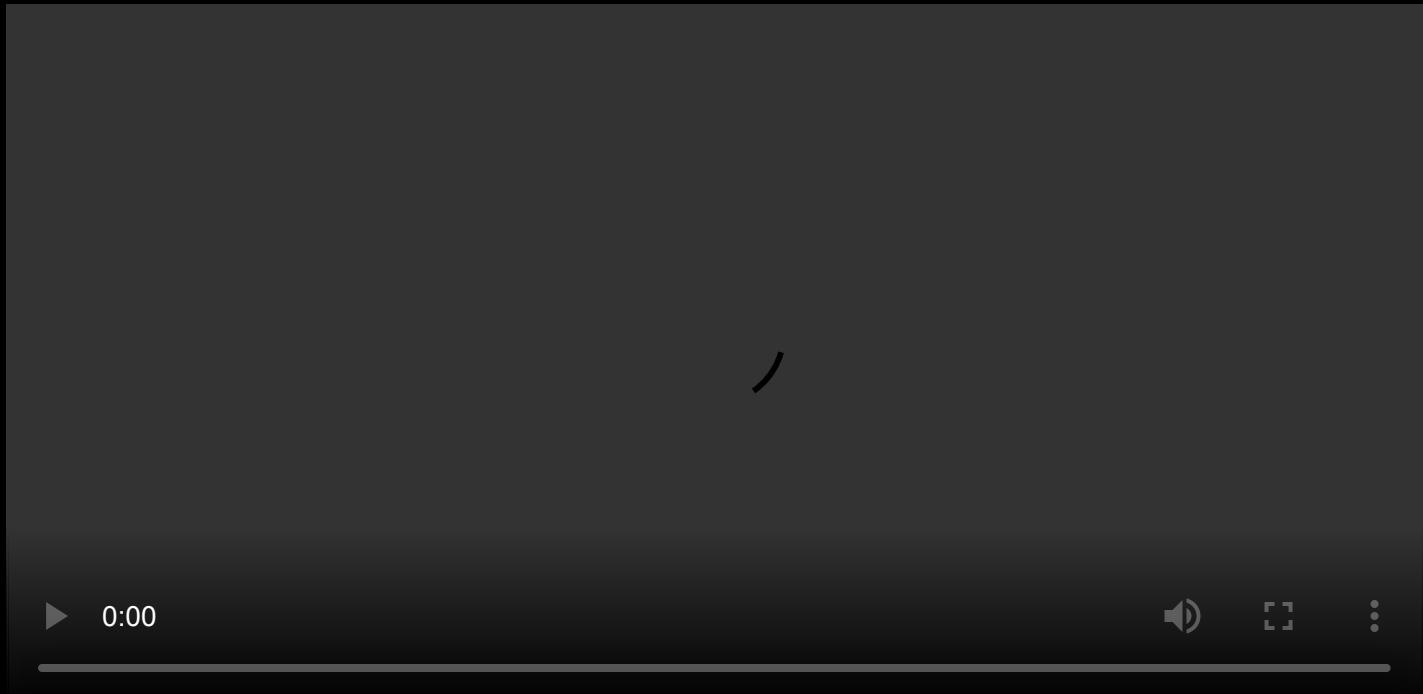
eɪ i: e aɪ əʊ u: a:

---

A	B	F	I	O	Q	R
H	C	L	Y		U	
J	D	M			W	
K	E	N				
	G	S				
	P	X				
T		Z <sub>ed</sub>				
V						
Z	ee					

**LIVE  
DEMO**

**OK, let's use voice to write  
code!**



# Browser

A screenshot of a GitHub repository page for [https://github.com/2shea/talon\\_configs](https://github.com/2shea/talon_configs). The page is styled with Talon voice command overlays, each represented by a yellow rounded rectangle with a letter inside:

- AA**: Located in the top left corner.
- DA**: Next to a user icon in the top left corner.
- FA**: Next to the search bar placeholder "Search or jump to...".
- SA**: Next to the "Pull requests" button.
- C**: Next to the "Issues" button.
- FF**: Next to the repository name [2shea / talon\\_configs](#).
- SF**: Next to the repository name [2shea / talon\\_configs](#).
- G**: Next to the "Code" button.
- AG**: Next to the "Issues 13" button.
- DG**: Next to the "Pull requests 0" button.
- SG**: Next to the "Projects 0" button.
- H**: Next to the "Projects 0" button.
- J**: Next to the "Voice command modules for talon voice" section.
- AJ**: Next to the "Manage topics" button.
- DJ**: Next to the "215 commits" button.
- FJ**: Next to the "6 branches" button.

# Challenges

# Learning Curve

it is steep



# Tools With Poor Accessibility



made on img.ly

# Voice Strain

guess what happens after talking to your  
computer for 8 hours a day?...

# Open Offices

Adding a microphone is a challenge... but there are solutions!

# Stenomask



Source: <https://talktech.com/stenomask-steno-sr/>

# Acoustic Pods



Source: [https://www.archiproducts.com/en/products/furniko/acoustic-multimedia-office-booth-focus-room\\_357574](https://www.archiproducts.com/en/products/furniko/acoustic-multimedia-office-booth-focus-room_357574)

# Remote Work, FTW!!

# Not So Big Challenges

- Supporting specific programming languages
- Building tools with Talon

# Voice Dictation Friendly Code

- Use abbreviations/acronyms thoughtfully
- Don't try to save vowels
  - `backspace` not `bkspc`
- shorter files are better

So... why.

# Take Aways

- Take care of your body!
- People are using speech to code in real life
- Remember non-keyboard users when building things :)
- The future may be more diverse than the keyboard/mouse model

# Thanks!

**BTW, Fastly is Hiring!**

# Links

- Talon: <https://talonvoice.com/>
- My Talon:  
[https://github.com/2shea/talon\\_configs](https://github.com/2shea/talon_configs)
- Talon Community:  
[https://github.com/dwiel/talon\\_community](https://github.com/dwiel/talon_community).
- Talon Patreon:  
<https://www.patreon.com/lunixbochs>