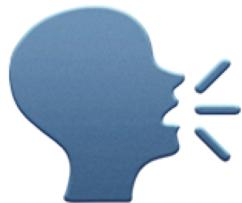


# Voice Driven Development



# whois emily

- Software Engineer
- 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 code (mostly Perl)... by voice

**But... Why??**

# RSI

(Repetitive Strain Injury)



# First I tried...

- Typing breaks
- Yoga/Stretching
- Wrist braces
- Massage
- Acupuncture
- Chiropractor

# Then I tried...

- Pain creams
- Anti-inflammatories
- Muscle Relaxers
- Occupational Therapy
- Physical Therapy
- Trigger point injections
- And More...



# Ergonomics



**THIS**

**IS MY SAD FACE**

quickmeme.com

# Voice??

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

The media could not be loaded, either because the server or network failed or because the format is not supported.



[Windows Vista Speech Recognition Tested - Perl Scripting, by scrubadub1](#)

But it actually works like...

The media could not be loaded, either because the server or network failed or because the format is not supported.



**But... How??**

# The Tech

Microphone



Dragon Dictation (for now)



Talon



# What Is Talon?

- Hands-free input
- Works with a voice engine (Dragon for now)
- Programmatically configured with Python
- Free!
- <https://www.patreon.com/lunixbochs>

# The ABC's (or ASDF's)

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					

# NATO Phonetic Alphabet

Alpha	Hotel	November	Uniform
Bravo	India	Oscar	Victor
Charlie	Juliett	Papa	Whiskey
Delta	Kilo	Québec	X-ray
Echo	Lima	Romeo	Yankee
Foxtrot	Mike	Sierra	Zulu
Golf		Tango	

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

**LIVE  
DEMO**

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

The media could not be loaded, either because the server or network failed or because the format is not supported.



WHALE QUENCH



# Challenges

# And Tips

# Learning Curve

it is steep 

# Tips

- Dedicated learning time
- Pair with a friend
- Remove time pressures
- Leverage the Talon community

# Tools With Poor Accessibility



made on img.ly

# Tips Requests!

- Make accessibility a priority
- Follow a11y guidelines
- Seek out resources
- Build as if *you* need it

# Voice Strain

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

# Tips

- Stay hydrated
- Don't whisper
- Don't shout
- Voice coach

# 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

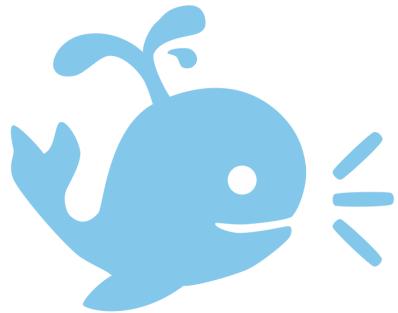
So... why.

# Take Aways

- Take care of your body!
- People are using speech to code in real life
- Consider *all*/users when building/designing
- The future may be more diverse than the keyboard/mouse model

# Thanks!

# Questions?



# WHALE QUENCH

<https://whalequench.club>

<https://talonvoice.com/>