# **Programming in Go**

Matt Holiday Christmas 2020



# **Parting Thoughts**

## Selected Go proverbs

#### Words to live by 😇

- Clear is better than clever
- A little copying is better than a little dependency
- Concurrency is not parallelism
- Channels orchestrate; mutexes serialize
- Don't communicate by sharing memory, share memory by communicating
- Make the zero value useful
- The bigger the interface, the weaker the abstraction
- Errors are values
- Don't just check errors, handle them gracefully

## A parting word from Tony Hoare

"There are two ways of constructing a software design: One way is to make it so simple that there are *obviously* no deficiencies and the other way is to make it so complicated that there are no *obvious* deficiencies."

— Tony Hoare *The Emperor's Old Clothes* (Turing Award Lecture, 1980)

## Elegance



**Simplicity** 



Complexity

## Some non-Go things

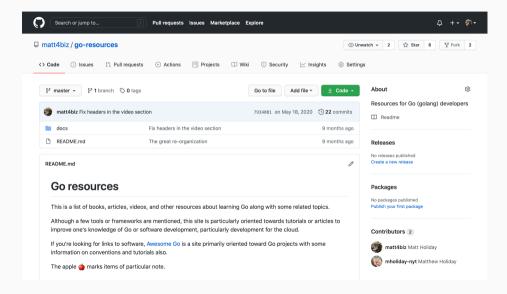
Here is a short list of presentations I think everyone should watch:

- Simple made easy (Rich Hickey, QCon 2012)
- Small is beautiful (Kevlin Henney, GOTO 2016)
- Software that fits in your head (Dan North, GOTO 2016)
- Worse is better, for better or for worse (Kevlin Henney, GOTO 2013)
- Solid snakes or How to take 5 weeks of vacation (Hynek Schlawack, PyCon 2017)

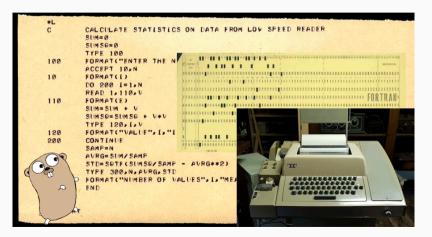
None of these are about Go, and all of them are about how to build software in Go

(no, I don't necessarily agree with every point made by these or other speakers)

#### Learning resources (books, blogs, videos)



## "Never stop learning"



### One more thing . . .

I will follow this class with another on building web apps in Go

- basic REST APIs
- databases
- GraphQL
- testing