



Andela Nairobi, May 25 2019

# INTRODUCTION TO GO

**Natalie Pistunovich**

Fraugster

@NataliePis



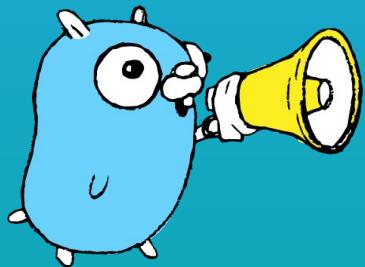
**Natalie Pistunovich**

Fraugster

@NataliePis







## AGENDA

- |                                      |    |
|--------------------------------------|----|
| <b>Intro to Go</b>                   | 01 |
| <b>Go as a Systems Language</b>      | 02 |
| <b>Hands On Tutorial</b>             | 03 |
| <b>Go in OSS and in the Industry</b> | 04 |
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## SECTION ONE

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# Intro to Go



Go is a free and open source programming language created at Google in 2007 as an answer to scale problems at Google!



**It's a system programming language,  
that is compiled,  
and statically typed,  
with a C-like syntax,  
garbage collection,  
and explicit support for concurrency.**



The standard library is covering most of the tools you will need, and it's usually the best practice to use it as much as possible.

“

BRIAN KERNIGHAN



Debugging is twice as hard as writing the code in the first place. Therefore, if you write the code as cleverly as possible, you are, by definition, not smart enough to debug it.

“

BRIAN KERNIGHAN



Make your code simple, not clever. Be  
merciless in your push for simplicity.  
Return an error if something can fail.  
Write tests for confidence.  
Take out time to test and refactor.



“

Try avoiding writing code like you would in your current language of choice. Spend some time to learn the “Go way”.

”





“

Learn what idiomatic Go looks like and what are the Go conventions, especially those related to documentation, packages and naming. ”





“ Make things small and  
compose them together,  
  
instead of trying to make  
inheritance hierarchies.

”





## SECTION TWO

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# Go as a Systems Language (pt. 1)

```
section lead h2 {
    padding: 20px 0px;
}
section lead p {
    font-size: 18px;
}
section lead text {
    vertical-align: center;
    padding: 10px 0px;
}
section lead {
    vertical-align: center;
    padding: 10px 0px;
    text-align: center;
}
section content {
    padding: 10px 0px;
    background-color: #32762c;
}
section content [class=col] {
    background-color: white;
    min-height: 450px;
    padding: 5px;
}
section content [class=col]:first-child {
    border-right: 1px solid #e6e6e6;
}
section content .row {
    padding: 5px 0px;
}
section content h3 {
    padding: 0px 0px 20px 0px;
}
```

63 results found for 'col'

col

Replace In current buffer

Finding with current Case insensitive  
All found Find Next Previous Replace

L1

U1

C1

P1

VIM - Vi IMproved

version 8.0.1283

by Bram Moolenaar et al.

Vim is open source and freely distributable

Help poor children in Uganda!

type :help iccf<Enter> for information

type :q<Enter> to exit

type :help<Enter> or <F1> for on-line help

type :help version8<Enter> for version info

VIM - Vi IMproved

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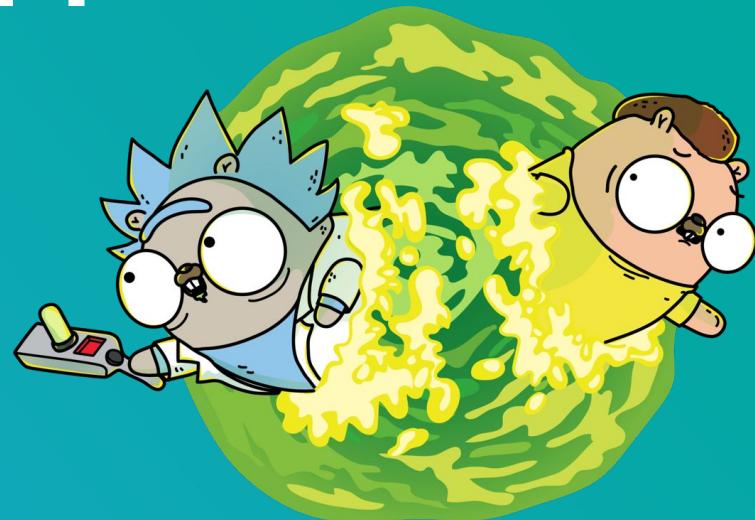
type :help<Enter> or <F1> for on-line help

type :help version8<Enter> for version info

## SECTION THREE

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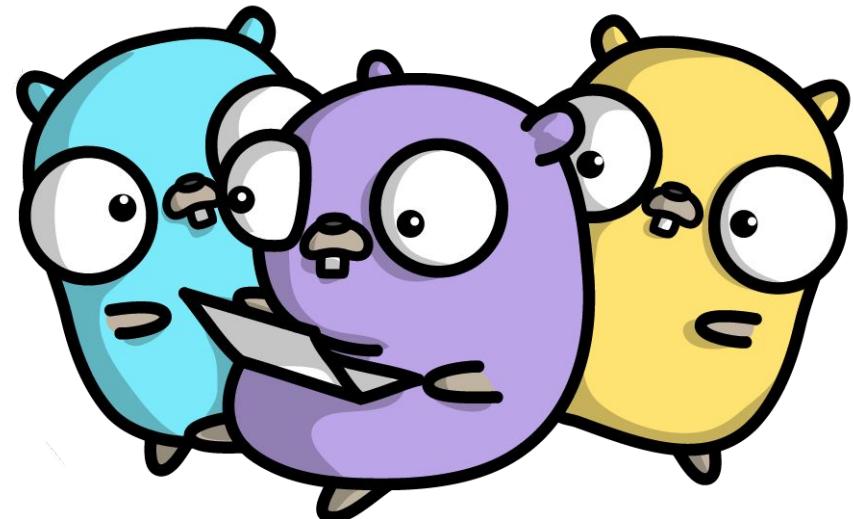
# Hands On Tutorial



Let's Get to Work!

---

[play.golang.org](https://play.golang.org)





## SECTION TWO

---

# Go as a Systems Language (pt. 2)



## SECTION FOUR

---

# Go in OSS and in the Industry

Go in OSS and in the Industry

---



# kubernetes

Go in OSS and in the Industry

---



# kubernetes

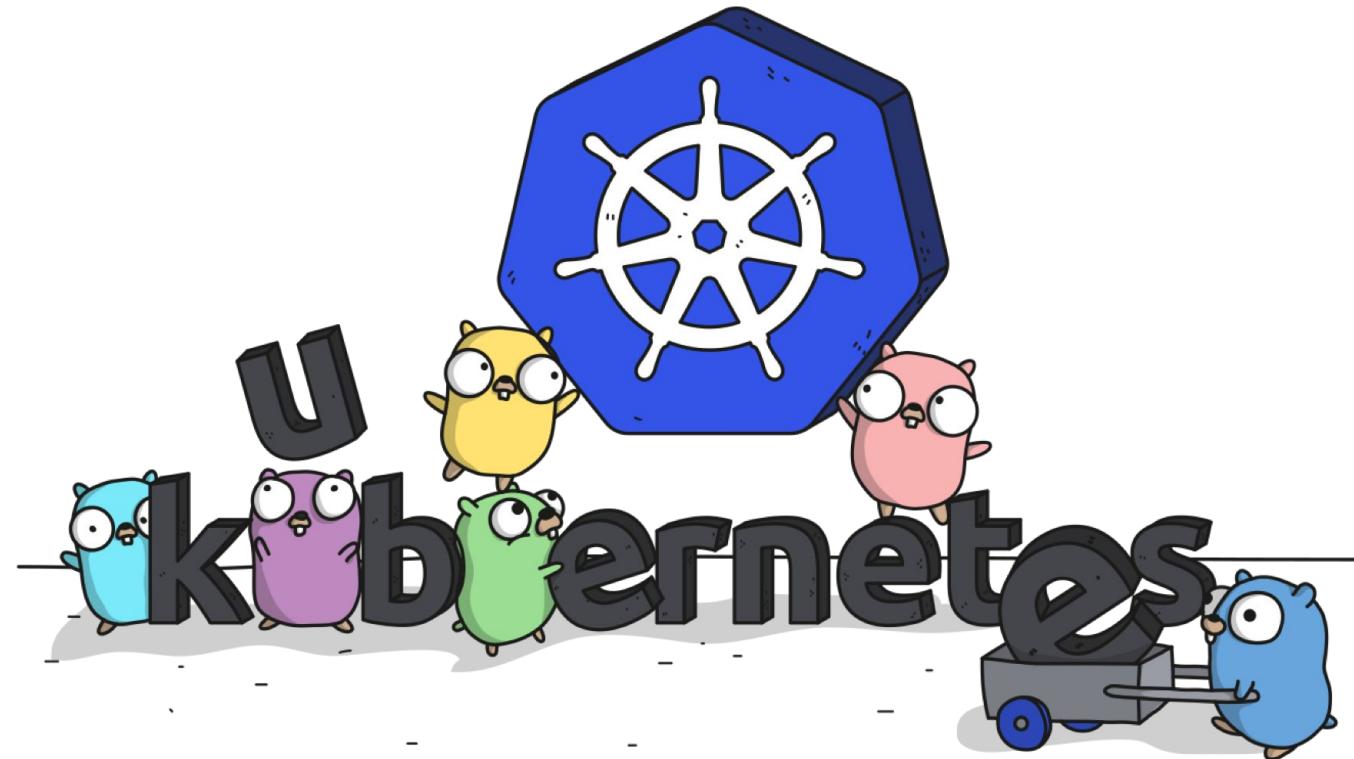
Go in OSS and in the Industry

---



# kubernetes

# Go in OSS and in the Industry



Go in OSS and in the Industry

---



Go in OSS and in the Industry

---



Go in OSS and in the Industry

---



# Prometheus

Go in OSS and in the Industry

---



# Prometheus

Go in OSS and in the Industry

---



# Prometheus

Go in OSS and in the Industry

---



# Prometheus

Go in OSS and in the Industry

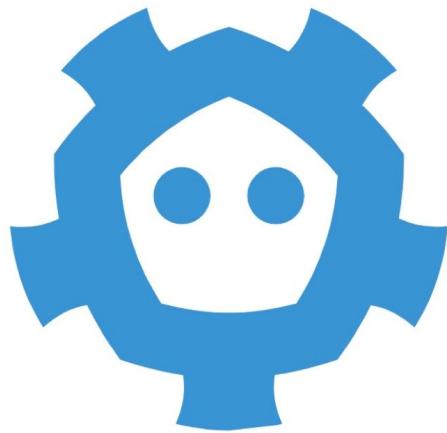
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# Prometheus

# Go in OSS and in the Industry

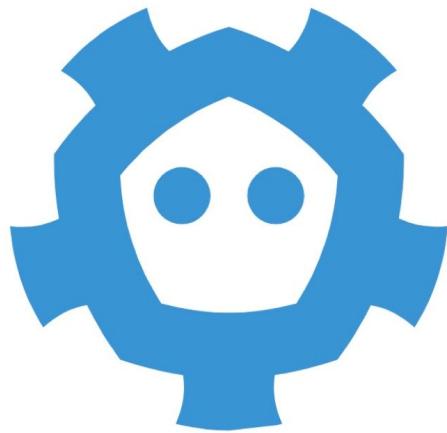
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etcd

# Go in OSS and in the Industry

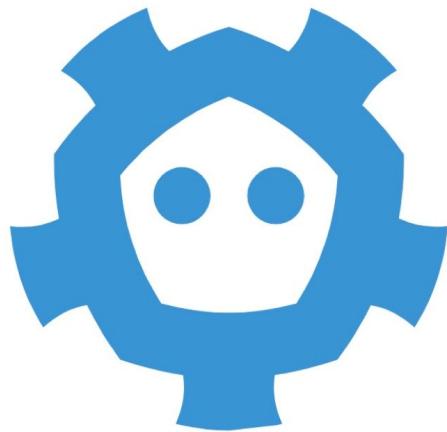
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etcd

# Go in OSS and in the Industry

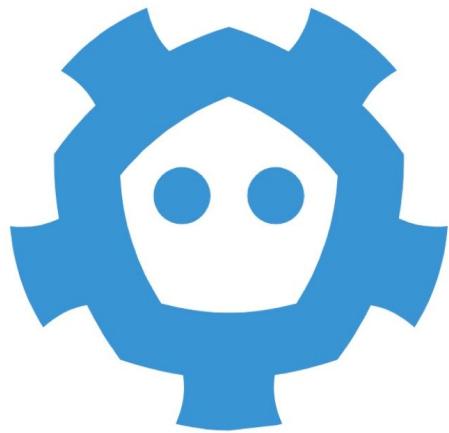
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etcd

# Go in OSS and in the Industry

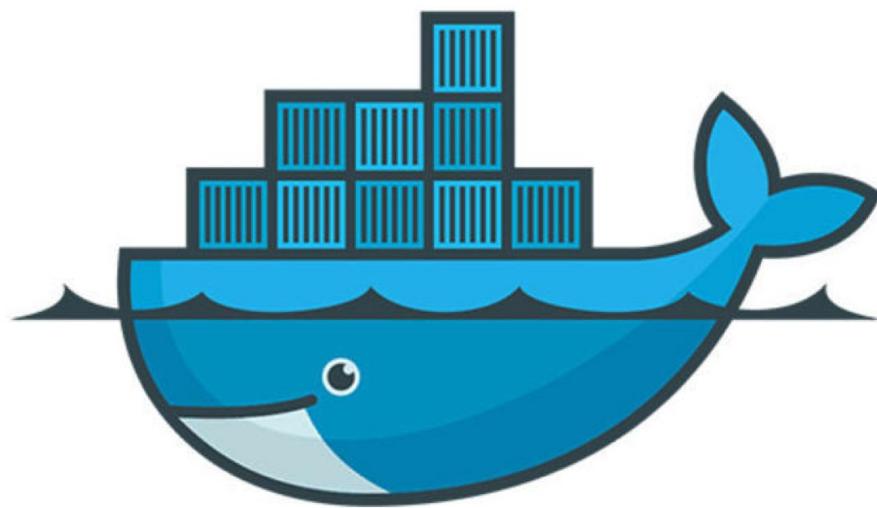
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etcd

Go in OSS and in the Industry

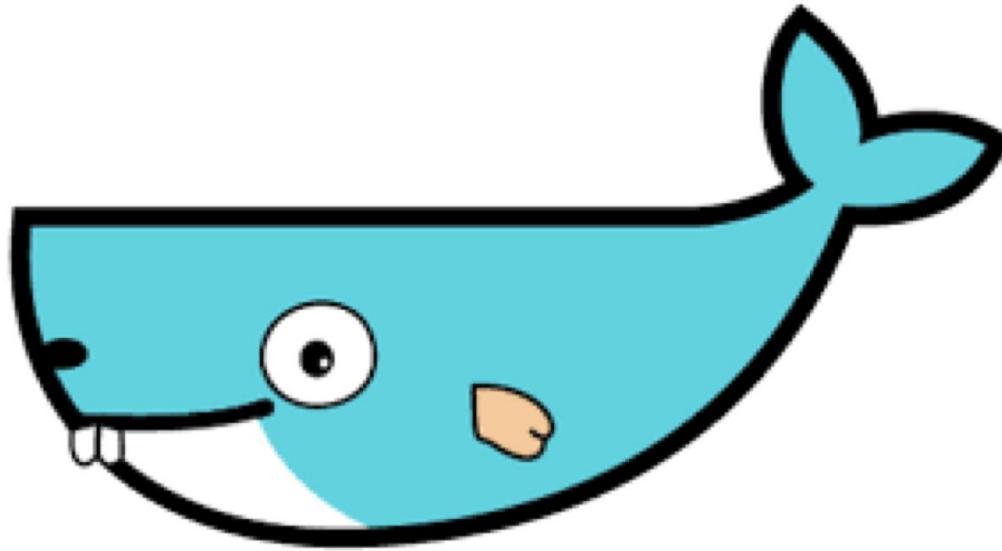
---



docker

# Go in OSS and in the Industry

---



docker

Go in OSS and in the Industry

---



# Grafana

Go in OSS and in the Industry

---



# Grafana

Go in OSS and in the Industry

---



# Grafana

Go in OSS and in the Industry

---



# Grafana

Go in OSS and in the Industry

---



# Grafana

Go in OSS and in the Industry

---



OPENTRACING

Go in OSS and in the Industry

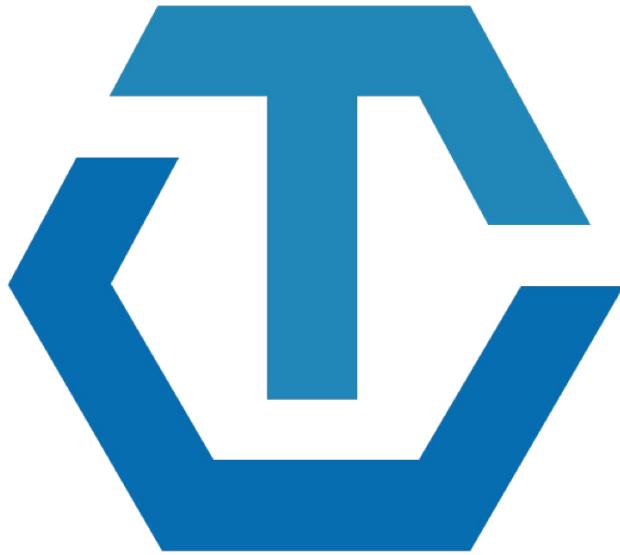
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OPENTRACING

Go in OSS and in the Industry

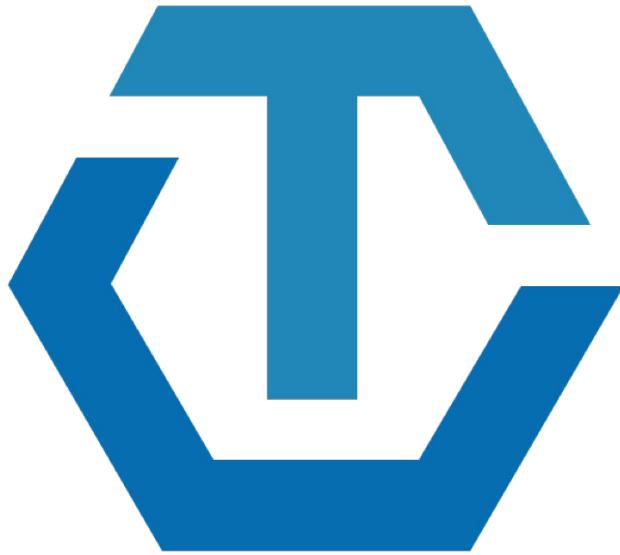
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OPENTRACING

Go in OSS and in the Industry

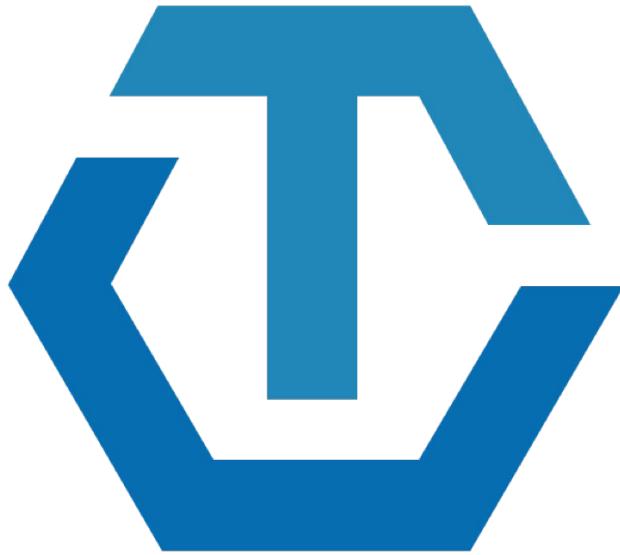
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OPENTRACING

Go in OSS and in the Industry

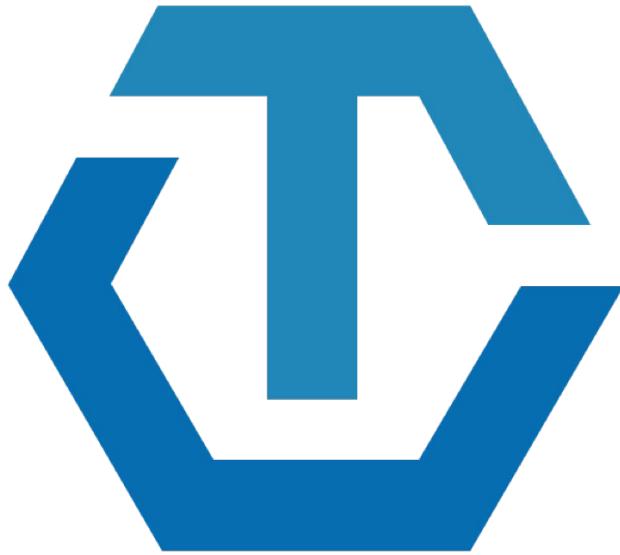
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OPENTRACING

Go in OSS and in the Industry

---



OPENTRACING

# Go in OSS and in the Industry

---



# JAEGER

# Go in OSS and in the Industry

---



# JAEGER

Go in OSS and in the Industry

---



JAEGER



# Go in OSS and in the Industry

---



# honeycomb



# Go in OSS and in the Industry

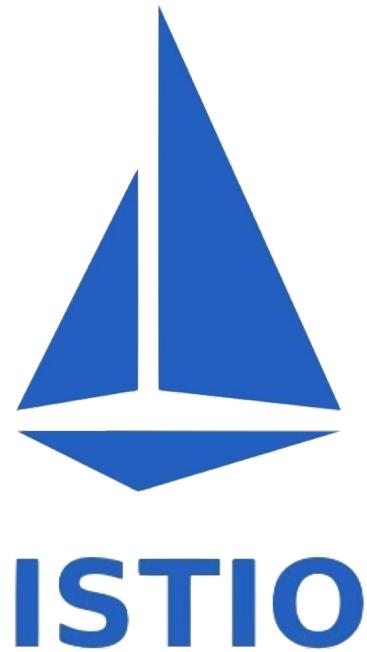
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# honeycomb

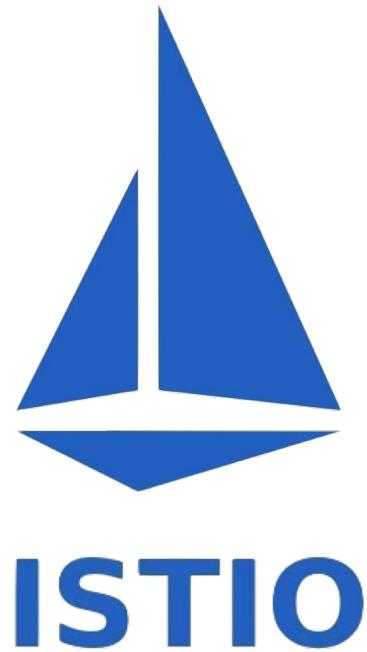
Go in OSS and in the Industry

---



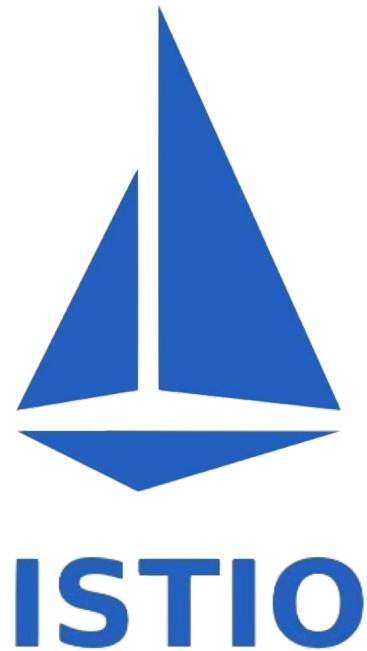
Go in OSS and in the Industry

---



Go in OSS and in the Industry

---



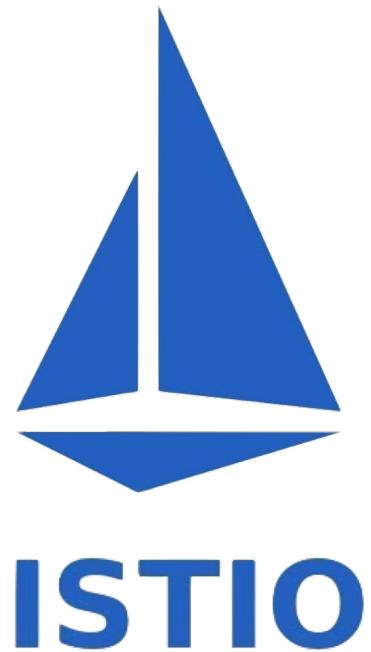
Go in OSS and in the Industry

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Go in OSS and in the Industry

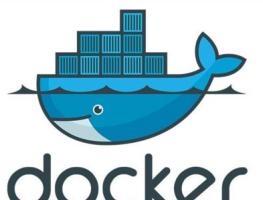
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# Go in OSS and in the Industry



kubernetes



docker



etcd



Prometheus



Grafana



OPEN TRACING



JAEGER



honeycomb

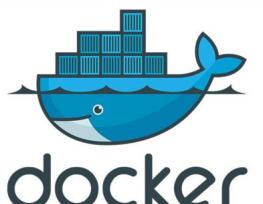


ISTIO

# Go in OSS and in the Industry



kubernetes



docker



etcd



Prometheus



Grafana



OPEN TRACING



JAEGER



honeycomb



ISTIO

# Go in OSS and in the Industry



DigitalOcean



CLOUDFLARE



mongoDB

NETFLIX

bitly



Core OS



SPACEX

zalando



Delivery Hero

Google



AEROSPIKE

BuzzFeed Walmart



Booking.com



eBay



# Go in OSS and in the Industry



# Go in OSS and in the Industry





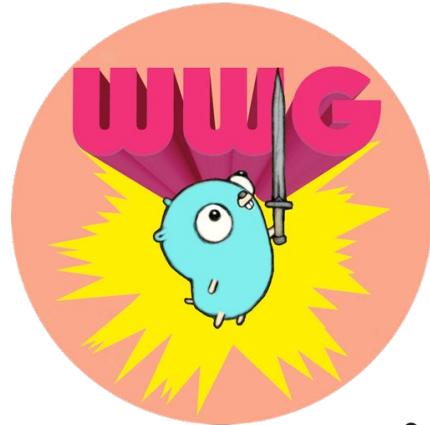
# Go in OSS and in the Industry



BE PART OF THE COMMUNITY



# Go in OSS and in the Industry

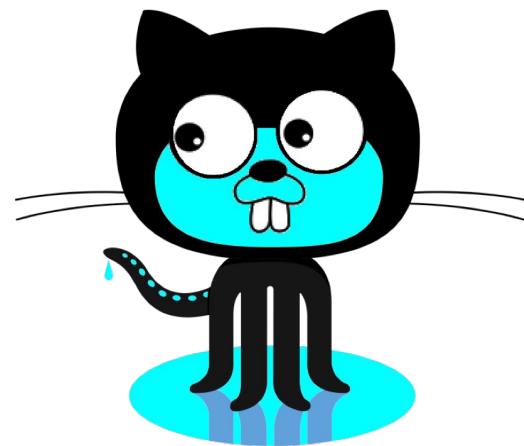


All this and more is from the wiki

---



[github.com/golang/  
go/wiki](https://github.com/golang/go/wiki)



BE PART OF THE COMMUNITY



## Conferences

Michael edited this page 4 days ago · 171 revisions

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### Go Conferences and Major Events

#### Upcoming

Please keep all items in chronological order. There is also a map of the confirmed 2019 conferences at [j.mp/goconmap](https://j.mp/goconmap). The map will be updated about once a week from the entries below. Errors in the map can be reported to [van@golang.org](mailto:van@golang.org).

Name	Date	Location	Website
GoCon Canada	2019-05-31	Toronto, Canada	<a href="https://gocon.ca">https://gocon.ca</a> CFP: <a href="https://www.papercall.io/goconca">https://www.papercall.io/goconca</a>
GopherCon Europe	2019-06-01-05-30	Tenerife, Canary Islands, Spain	<a href="https://www.gophercon.es">https://www.gophercon.es</a> CFP: <a href="https://www.papercall.io/gophercon-eu-2019">https://www.papercall.io/gophercon-eu-2019</a>
GoGoConf	2019-06-14	Krakow, Poland	<a href="https://www.gogoconf.rocks">https://www.gogoconf.rocks</a> CFP: <a href="https://www.papercall.io/gogoconf">https://www.papercall.io/gogoconf</a>
Gophercon Poland	2019-06-27	Gdansk, Poland	<a href="https://twitter.com/GopherConPL">https://twitter.com/GopherConPL</a> CFP: <a href="https://eventil.com/events/GopherConPL/cfp">https://eventil.com/events/GopherConPL/cfp</a>

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- All Events
- Open CFPs Only
- Only Recurring Events/Meetups

 Offers Travel Assistance[Save Search as an Alert](#) SearchTag search only: `tags: first tag, second tag, etc...`**PRO EVENT**

## DevOpsDays Toronto 2019 - Toronto, Ontario, Canada

**DEVOPSDAYS** <https://www.devopsdays.org/events/2019-toronto/welcome/>  
**TORONTO '19****Event Dates:** May 29, 2019, May 30, 2019**Culture, Automation, Testing, Infrastructure, Security**

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**Diversify Tech** @DiversifyTechCo · May 2  
Here's our weekly digest!

[@TechtonicaOrg](#)'s apprenticeship program is accepting applications! May 9th!

Join the [@BTPipeline](#) & [@femstreet](#) newsletters

[@CodeNewbies](#) is looking for a Developer Advocate

Apply for Scholarships to [@ReactRally](#) & [@ghc](#)

[buff.ly/2PHzNWo](http://buff.ly/2PHzNWo)



8

10

you@yourdomain.com

First name

Last name

I agree to the [Code of Conduct](#).



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Join the local community

meetup.com/

Nairobi-Gophers/



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=GO

## SECTION FIVE

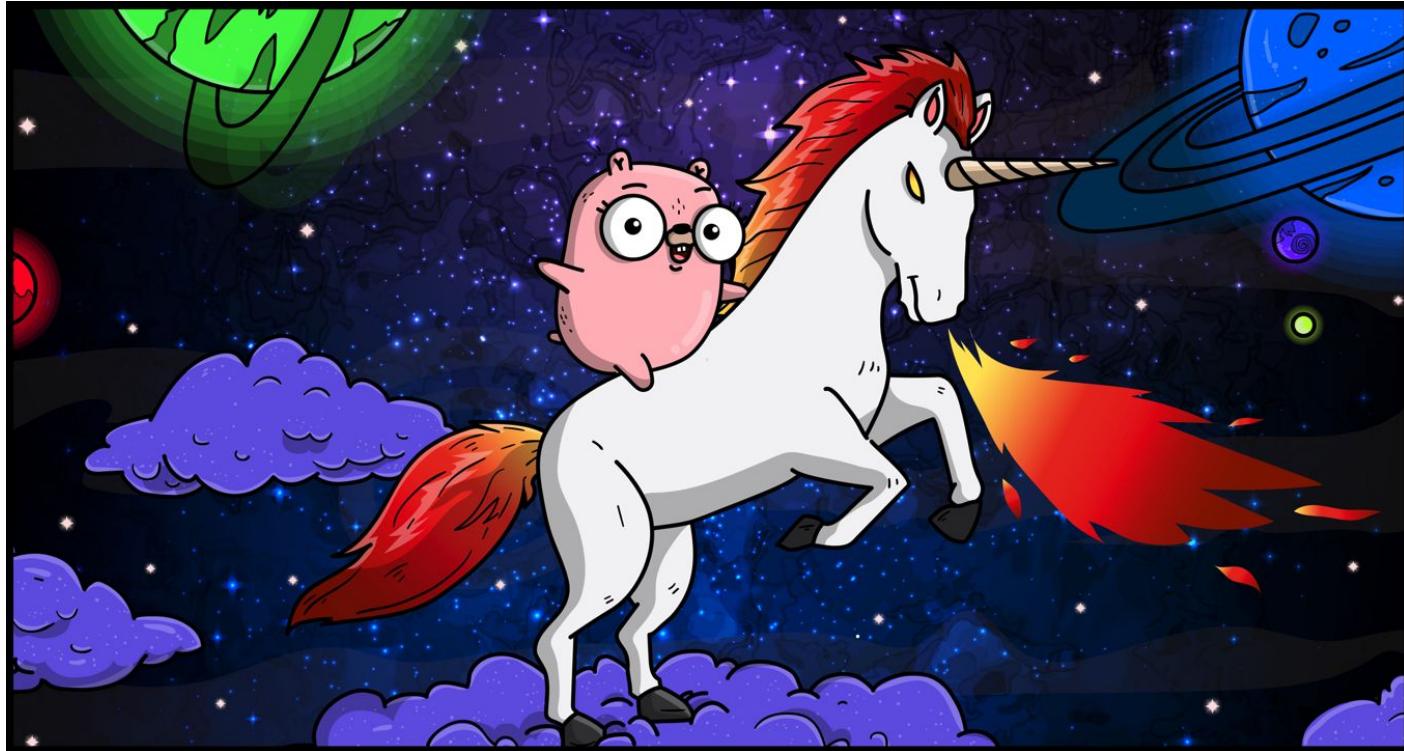
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# Build Your First Web Server





# Let's Get to Work!



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## SECTION SIX

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# Summary



[invite.slack.golangbridge.org](https://invite.slack.golangbridge.org)



[github.com/golang/go/wiki](https://github.com/golang/go/wiki)



[play.golang.org](https://play.golang.org)



[golang.org/blog](https://golang.org/blog)



[twitter.com/golang](https://twitter.com/golang) (also: #golang)



THE END

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# Thank You!

#golang @NataliePis @goingGoDotNet  
@Mercy\_Orangj #golangAtAndela @Andela  
@GoBridge