Links to Go Language Resources

Items in red are particularly interesting

30 August 2019

1 Books

The Go Programming Language, Donovan & Kernighan, Addison-Wesley, 2015, 9780134190440 (also look through the Go release notes for changes)

Get Programming with Go, Youngman & Peppe, Manning, 2018, 9781617293092

Head First Go, McGavren, O'Reilly, 2019, 9781491969557

Introducing Go, Doxsey, O'Reilly, 2016, 9781491941959

Teach Yourself Go in 24 Hours, Ornbo, Sams, 2017, 9780672338038

Go in Action, Kennedy et al, Manning, 2015, 9781617291784

Go Web Programming, Chang, Manning, 2016, 9781617292569

Concurrency in Go, Cox-Buday, O'Reilly, 2017, 9781491941195 (advanced material)

Writing an Interpreter in Go, Ball, 2018, 9783982016115

Writing a Compiler in Go, Ball, 2018, 9783982016108

Let's Go! Learn to Build Professional Web Applications With Golang, 2019, (gumroad)

12 Factor Applications with Docker and Go, Petric, 2018, (leanpup)

API Foundations in Go, Petric, 2019, (leanpub)

Production Go, Schaaf & Smith, (in development), (leanpub)

2 Twitter

@golang

@golangweekly

@gophercon

@goinggodotnet (Bill Kennedy)

@davecheney (Dave Cheney)

@golangweekly

3 Websites

Go downloads, docs, blog, FAQ

Go playground

Why Go?

Why Go? — Key advantages you may have overlooked

Dave Cheney's blog

Eli Bendersky's blog

GopherAcademy blog

Ardan Labs blog

Alex Edwards' blog

Some Liz Rice articles

Golang Weekly (sign up for email)

The Go Gazette (ditto)

Blog list

A curated list of awesome Go frameworks, libraries and software

4 GopherCon

2019 Death by 3,000 Timers, Dynamically Instrumenting Go Programs and more

2018 Videos and Summaries as well as The scheduler saga and Allocator wrestling

2017 2017 talks as well as Understanding channels and Distributed gomputing

2016 2016 talks and Go assembler

2015 2015 talks

2014 2014 talks

5 Articles

Go at Google: Language Design in the Service of Software Engineering

Resources for new Go programmers

Rob Pike's 5 rules of programming

Less is exponentially more

Dave Cheney's Clear is better than clever and Practical Go [this is a must-read!] and High Performance Go Workshop

10 most-common mistakes

Profiling Go programs

Garbage Collection In Go : Part I and Part II (part III to follow)

Google Go code review comments

Go is on a Trajectory to Become the Next Enterprise Programming Language

Go hits the concurrency nail right on the head

Go JSON Cookbook

Fifty Shades of Go

Java to Go in-depth tutorial

Go: Best Practices for Production Environments

Building a Simple CLI Tool with Go

Writing and Optimizing Go code

Profiling & Optimizing in Go

Standard Go project layout

Allocation efficiency in high-performance Go services

How a Go Program Compiles down to Machine Code

How to ship production-grade Go

How to write bulletproof code in Go: a workflow for servers that cant fail

A debugger from scratch—part 1 and part 2

Shrink your Go binaries with this one weird trick

The Ultimate Guide to Writing Dockerfiles for Go Web-apps

Idiomatic Go Resources

The Ideas That Shaped Go

A Comprehensive Guide of Arrays and Slices in Golang

The Tale of the Missing Read Handler in Go

S3 Image Uploads via AWS-SDK with Golang

Build a Serverless API in Seconds with Go

A Cognito Protected Serverless API with Golang in Minutes

Why you should use a Go module proxy

6 Videos

Be sure to search for stuff from Rob Pike, Robert Griesemer, Russ Cox, Francesc Campoy, Liz Rice, and Kavya Joshi as well as other conferences such as Golang UK, dotGo, GothamGo, etc.

Go proverbs

Understanding nil

Twelve Go best practices

Concurrency patterns in Go

Concurrency is not parallelism

Concurrency made easy

Rethinking classical concurrency patterns

Clear is better than clever

SOLID Go design

Production-ready Go

The Robustness of Go

A Go Programmer's Guide to Secure Connections (LondonGophers '18) and (GopherCon '18)

Going Serverless (GopherCon '18)

Go's realtime GC

Simplicity is complicated

Containers from scratch

Debuggers from scratch

The evolution of Go

Prototype your design!

A look at the criticism of Go

Closures are the generics of Go

Writing beautiful packages in Go

Moving from C to Go in the toolchain

Constant time

Go tune your memory

Optimizing Go code without a blindfold

Go as a scripting language in Linux

Channels as semaphores

Behavior of channels

The monsters inside sync.Locker

Testing: How, What, and Why

The Robustness of Go

“go test -race” Under the Hood

Writing Beautiful Packages in Go

Go Module Proxy: Life of a Query (Gophercon ’19)

The Athens Project (Gophercon ’19)

PKI for Gophers (Gophercon ’19)

Two Go Programs, Three Different Profiling Techniques (Gophercon ’19)

How I Write HTTP Web Services after Eight Years (Gophercon ’19)

On the Path to Go 2 (Gophercon ’19)

Generics in Go (Gophercon ’19)

7 Microservices & Cloud

Introduction to Docker

Introduction to Microservices, Docker, and Kubernetes

Intro to gRPC: A Modern Toolkit for Microservice Communication

Best Practices for (Go) gRPC Services

10 tips for failing badly at microservices

Microservices in the Cloud with Kubernetes and Istio (Google I/O ’18)

Google Cloud Platform on a shoestring budget (Google I/O ’18)

Google Cloud Platform 101 (Google I/O ’18) and (Cloud Next ’19)

Incrementally Adopting Istio (Cloud Next ’19)

Istio in Production: Traffic Routing (Cloud Next ’19)

Canary Deployments With Istio and Kubernetes Using Spinnaker (Cloud Next ’19)

APIs, Microservices, and the Service Mesh (Cloud Next ’19)

AWS Tutorial For Beginners

Cloud Yeti Terraform tutorials: Provision EC2 on AWS with Terraform, Terraform Remote State on Amazon S3, Multiple terraform configuration (.tf) files

Another Terraform tutorial: 1: AWS demo: create VPC & subnet, 2: Terraform variables, data sources, loops, 3: Terraform map and lookup function

8 Web Programming

Authentication on the Web

OAuth 2.0 and OpenID Connect (in plain English)

Implementing JWT based authentication in Golang

Writing Web Applications

Serving HTML with Go

Writing HTTP servers

Developing and deploying a whole website in Go

Building a modern application with a Golang API backend + a Vue.js SPA frontend

Build a web application in Go

Using context cancellation in Go

Thoughts on Go after writing 3 websites

Dont use Gos default HTTP client (in production)

GraphQL with Golang

Full Stack GoLang Tutorial with PostgreSQL

Gorilla web toolkit (software)

Nosurf (software)

9 Database

Go database/sql tutorial

Go Database/SQL

Design patterns in Go's database/sql package

To ORM or not to ORM

Practical Persistence in Go

SQL Database Programming in Golang (video)

SQLX (software)

10 Mechanical Sympathy

Mechanical Sympathy

Mythbusting Modern Hardware to Gain Mechanical Sympathy (video)

Weak vs Strong Memory Models

Memory Reordering Caught in the Act

Is Parallel Programming Hard, And, If So, What Can You Do About It?

A Tutorial Introduction to the ARM and POWER Relaxed Memory Models

ARM Architecture Reference Manual