

# TiagoKatcipsis

Software Engineer

## Contact

Berlin, Germany  
+39 349 859 0291  
tiagokatcipsis@gmail.com  
GitHub  
LinkedIn  
Blog

## Education

Bachelor of Computer  
Science, UFSC, Brazil.

## Languages

English, Portuguese.

## Skills

Software architecture  
and design.  
Critical thinking and  
problem  
decomposition.  
Clear communication,  
written and spoken.

## Programming Languages

Go, Python, C, C++,  
Lua, Bash, Javascript.

## Protocols

HTTP, gRPC, SIP, RTP,  
AMQP.

## Automation and Infrastructure

Kubernetes, AWS,  
Azure, Google Cloud,  
Docker, Terraform,  
Ansible, Make, Vagrant,  
Docker Compose.

## Monitoring

Prometheus, Grafana,  
StatsD, Sysdig.

## Introduction

I'm a curious programmer who likes to explore different ways to design, build and test software always trying to understand as much as I can from the entire environment I'm working in. That led me to do a lot of different things in my 10 years career, from embedded software in C to distributed systems in a variety of languages and protocols. I'm passionate about automation and minimalism when building scalable, efficient and flexible software.

## Experience

2019–present **FromAtoB**

Berlin, Germany

*Software Engineer - Search2Book Team*

- Implemented new location service from scratch (Go, HTTP, gRPC).
- Added PSD2 compliance on payment method storage service (Go).
- Helped migrate core services from legacy environment to new GKE (Google Kubernetes Engine) cluster.
- Built backup routines for critical service (Google Memorystore).
- Improved development environments making them more consistent.
- Integral part of the hiring process doing interviews and pair programming sessions.

2017–2019 **Neoway**

Florianópolis, Brazil

*Software Engineer - Data Platform Team*

- Led the migration of the entire data platform from AWS to Azure.
- Developed tools to automate building infrastructure, like k1b.
- Created new service to solve audio captchas (Go, Python, SVM).
- Prototyped image captcha solver using TensorFlow.
- Did 3 different presentations in 2 different conferences.

2015–2017 **Neoway**

Florianópolis, Brazil

*Lead Software Engineer - Data Capture Team*

- Led development of a new data capture architecture.
- Implementation of multiple services for the new architecture (Python, Go).
- Added improved and fully automated monitoring system (Sysdig, StatsD).
- Coached the team on better testing practices and TDD.
- Fully automated dev environments and deployment (Docker, Docker Compose).
- First team in the company to deploy and use Kubernetes to manage more than 100 deployments.

2010–2015 **Dígitro**  
*Software Engineer*

Florianópolis, Brazil

- Developed VoIP phone with color touchscreen from scratch (C on a Blackfin DSP).
- Automated development environment for cross compilation (Ansible, Vagrant).
- Replaced legacy audio service that used Flash (RTMP) with an HTTP/HTML5 solution (NodeJS,C).
- Built new REST service to integrate with company PBX solution (proprietary protocol).
- Built a customized audio playback system (Flash, RTMP, GStreamer, C++).
- Built a biometric identification service (HTTP, Lua, C, MongoDB).
- Coached team on automated testing and TDD.

2008–2010 **Dígitro**  
*Trainee*

Florianópolis, Brazil

- Worked on making Windows only VoIP softphone cross platform (C, GStreamer, RTP, SIP).
- Prototype of biometric identification service (Python, GTK, C).
- Prototype of face detection system with processing on the edges (C, OpenCV).

## Projects

### mdtoc

<https://github.com/madlambda/mdtoc>

A very simple table of contents generator for markdown.

### nash

<https://github.com/NeowayLabs/nash>

Nash is a shell language focused on simplicity and having a nicer syntax than traditional shells and support to containers. It also strives to be safer than traditional shells.

### klb

<https://github.com/NeowayLabs/klb>

klb is used to automate infrastructure creation on AWS and Azure.

## Presentations

- |      |  |                           |
|------|--|---------------------------|
| 2018 | <b>Object Orientation in Go</b>  | The Developers Conference |
|      | Presented the Go object model as something closer to the original idea from Alan Kay then classic object oriented languages like Java and C++. Presentation source can be found <a href="#">here</a> . |                           |
| 2016 | <b>Building Resilient Services in Go</b>   | GopherCon Brazil          |
|      | Presented new features on Go, like Contexts, that helps to model timeouts and cancellation properly, which are essential to build a resilient system.  |                           |
|      | Presentation source can be found <a href="#">here</a> .  |                           |
| 2016 | <b>Real Life Kubernetes</b>  | The Developers Conference |
|      | On this presentation we will give a short introduction on Kubernetes and show the experience of learning and using Kubernetes on production. Presentation source can be found <a href="#">here</a> .   |                           |