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## Tomás Senart, Lead Engineer

Highly effective engineer and leader with over 15 years of experience in the industry. Passionate about technology, people, and shipping products that leave users in awe. Skilled in zero-to-one projects, scaling them to meet business needs, and securing longer-term stability.

### Employment History

#### Senior Blockchain Engineer at Mekatek, Remote

2022 — Present

Designed, built and launched Zenith, the first block-space auctioning system for Cosmos and Tendermint based blockchains.

Developed x/mev module: a proposed standard for block-space auctioning in Cosmos blockchains.

#### Staff Engineer & Manager at Sourcegraph, Remote

2018 — 2022

Revamped code syncing to handle up to 500k repos from any code host.

Led and grew the backend engineering team & the then nascent Cloud team.

Scaled sourcegraph.com search to handle 5M open-source repos with sub second P90 latency.

Advocated and promoted remote-first best practices.

#### CTO at OptioPay Group, Berlin

2017 — 2018

Led the technology side of things to help people make the most out of their money.

Areas of responsibility: Engineering, InfoSec, Compliance, People Management, Coaching, Mentoring, Talent Acquisition.

#### Independent Consultant at Numbrs Personal Finance AG, Remote

2015 — 2016

Software engineering, quality bar raising, mentoring and tutoring in Go, software architecture and design, distributed systems and concurrent programming.

Technically led the software development of multiple critical projects and components, both internal and user facing.

#### Distributed Systems Engineer: Technical Lead at Mesosphere, Remote

2015

Led DCOS Service Discovery & Load Balancing project while being the core maintainer of Mesos-DNS.

Designed and implemented new Mesos Go bindings that will be fully compatible with the Mesos HTTP APIs.

Worked on the Kubernetes on Mesos integration and provided advice and expertise on the Go programming language to the whole team.

Refactored and improved large parts of Mesos-DNS in order to bring it to a maintainable state.

Oversaw hiring efforts of Go programmers for Mesosphere in Berlin.

## **Independent Consultant at Apple, Remote**

2014 — 2015

Distributed systems and reliability engineering of mission critical data systems for the Manufacturing & Design group.

## **Independent Consultant at Thomson Reuters, Remote**

2013 — 2014

Worked on performance, availability and failure tolerance of Eikon's large scale XMPP/SIP messaging platform.

## **Software Engineer at SoundCloud, Berlin**

2011 — 2013

Developed, operated and scaled key components of SoundCloud's microservice architecture.

Activities: High-volume, soft real-time big data system backing the social activity Stream (front-page of SoundCloud).

Semantic Event Bus: Highly available event driven data integration backbone for streaming data processing.

Bazooka: Internal PaaS system running developers' applications in production.

Next: Development of key elements of the Next SoundCloud's backend infrastructure.

AreWePlayingYet: Led the development of a public test-suite used by major browsers to evaluate cross-browser consistency of HTML5 Audio and WebAudio APIs.

### **Skills**

#### **Go**

#### **Distributed Systems**

#### **Python**

#### **Scalability**

#### **Haskell**

#### **Blockchain**

#### **Applied Cryptography**

#### **PostgreSQL**

#### **Systems Architecture**

#### **Leadership**

#### **DevOps**

#### **Open Source**

#### **Kubernetes**

#### **Rust**

#### **Deep Learning**

#### **Docker**

## Performance Optimization

### Open Source

#### **Vegeta**

Designer, implementer and maintainer of Vegeta, an HTTP load testing tool with nearly **21k Github stars** used by companies like **Netflix, NPR, BBC, Heroku, SoundCloud**, Skyscanner, SauceLabs, Pusher and others.

#### **ULID**

Designer, implementer and maintainer of the now standard ULID Go library with over **3.3K stars on Github**.

### Public Speaking

#### **Embrace the Interface, Gophercon US, Denver, USA**

2015

Go gives us powerful abstraction through interfaces with no bureaucracy. In my quest to find the right balance between pragmatism and abstraction, I have developed some useful patterns that leverage Go's interfaces to make code modular, lean and clean. This is a hands-on opinionated talk about software craftsmanship and sane abstraction techniques.

Video: <https://youtu.be/xyDkyFjzFVc>

#### **Vegeta: HTTP Load Testing, dotGo, Paris, France**

2014

An introduction to load testing with Vegeta. It's over 9000! Video: <https://youtu.be/yg7zsuasllE>

#### **KISS MY LOAD TESTING!, Codebits VII, Lisbon, Portugal**

2014

KISS (Keep It Simple Stupid) reflects the above quote as a Software Engineering principle. Most often than not it is disregarded in the battlefields of companies rushing through deadlines.

In this talk I will Go through the context, process and the thoughtful design decisions involved in building Vegeta, an HTTP load testing tool and library written in Go. It will be over 9000!!!

Video: <https://videos.sapo.pt/BtpOZZ8z55DUQRIU9aFs>

### Education

#### **Bachelor of Computer Technology and Computer Systems Technology, Universidade de Lisboa, Lisbon**

2009 — 2010

### Courses

#### **Introduction to Deep Learning | 6.S191 at MIT**

March 2023

#### **Neural Networks: Zero to Hero at Andrej Karpathy**

March 2023

#### **Cryptography I at Stanford University (Coursera)**

2014

Languages

**English**

**Portuguese**

**German**

References

**References available upon request**

Links

**Twitter**

**Github**

**LinkedIn**