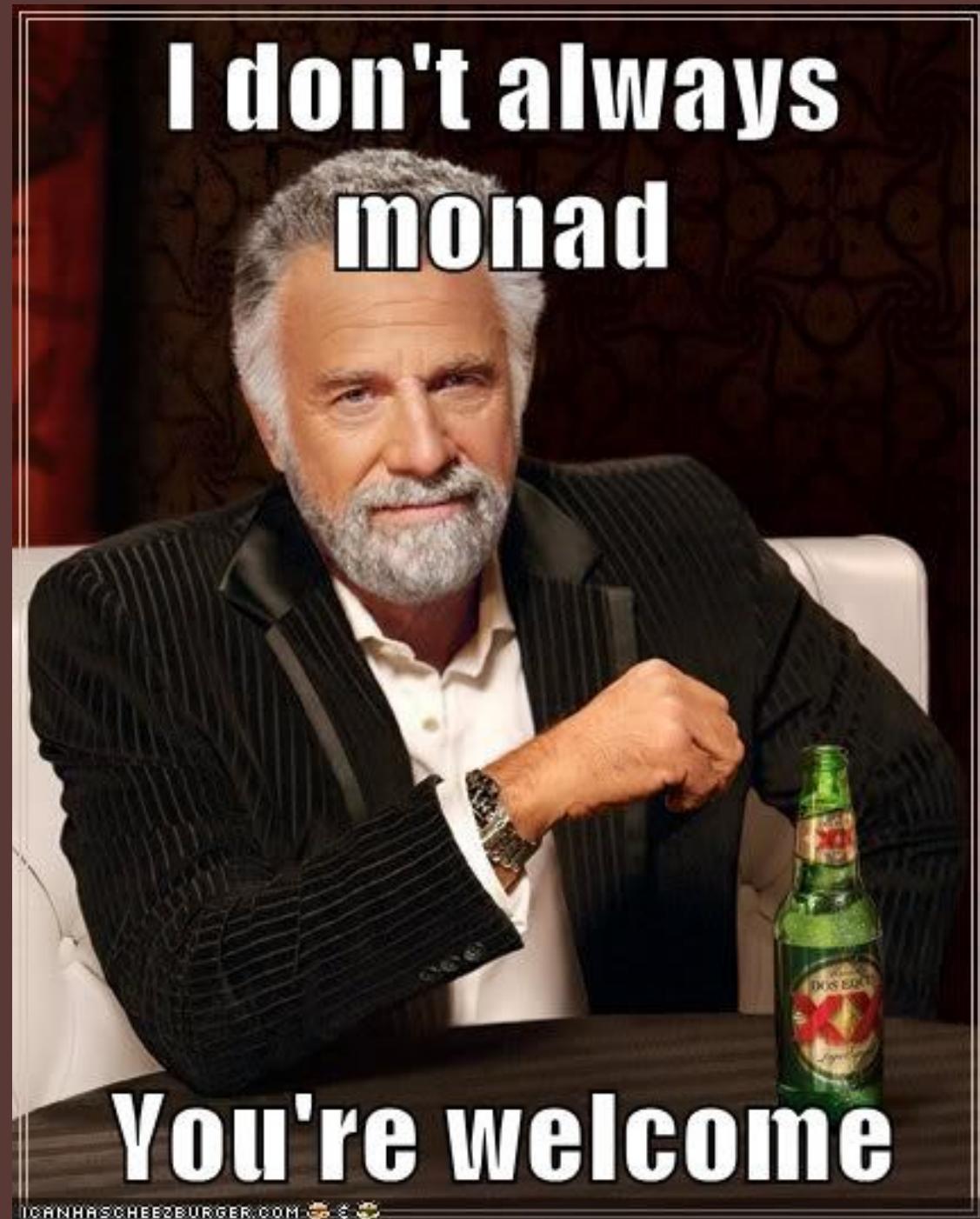


Lessons learnt from being a ZIO contributor

You won't learn about MONAD's

- >> About Salar Rahamanian
- >> My journey to being an open source contributor with ZIO
- >> How you can be a ZIO Contributor
- >> Lessons Learnt



About Salar Rahamanian

- >> Also known as **softinio**
- >> Blog: <https://www.softinio.com>
- >> Twitter: [@SalarRahmanian](https://twitter.com/SalarRahmanian)



What have I been up to

- >> I like to drink wine 🍷
- >> Pascal, Fortran, C (University)
- >> C Programmer on Unix & Vax VMS
- >> Java
- >> Python
- >> Scala
- >> Trying to get good at Functional Programming
- >> Early contributor to ZIO and related projects



Community & Meetup's

- » San Francisco Scala Meetup (<http://sfscala.org>)
- » Scala Bay (Silicon Valley) Meetup (<https://www.meetup.com/Scala-Bay/>)
- » San Francisco Java User Group Meetup (<http://www.sfjava.org>)
- » San Francisco Elastic User Group (<https://www.meetup.com/Elasticsearch-San-Francisco>)
- » Bay Area Nix/NixOS User Group (<https://www.meetup.com/Bay-Area-Nix-NixOS-User-Group/>)
- » SF Spark and Friends (<https://www.meetup.com/SF-Spark-and-Friends/>)
- » Bay Area AI (<https://www.meetup.com/bay-area-ai/>)
- » GraphQL By the Bay (<https://www.meetup.com/graphql-by-the-bay>)

Community Slack and Discord: <https://www.sfbayareatechies.com>)

For announcements and something new being launched later this year follow me on
twitter: @SalarRahmanian

Open Source



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How ZIO started



Contribute to ZIO

The screenshot shows the GitHub organization page for ZIO. At the top, it displays the ZIO logo, the tagline "ZIO — Real World Functional Programming", and a verified link to <https://zio.dev/>. Below this, there are tabs for Repositories (49), Packages, People (36), Teams (22), Projects, and Settings. The "Repositories" tab is selected.

Pinned repositories:

- zio**: A type-safe, composable library for async and concurrent programming in Scala. Scala, 2.5k stars, 678 forks.
- interop-cats**: ZIO instances for cats-effect type classes. Scala, 66 stars, 33 forks.
- zio-nio**: A small, unopinionated ZIO interface to NIO. Scala, 94 stars, 43 forks.
- zio-keeper**: A ZIO library for building distributed systems. Scala, 157 stars, 29 forks.
- zio-kafka**: A Kafka client for ZIO and ZIO Streams. Scala, 171 stars, 59 forks.
- zio-sqs**: ZIO-powered client for AWS SQS. Scala, 56 stars, 15 forks.

Below the pinned repositories, there are search and filter options: "Find a repository...", "Type: All", "Language: All", and a "New" button. To the right, there are sections for "Top languages" (Scala, Shell) and "Most used topics" (zio, scala, functional-programming, connector, streams). At the bottom, there is a "People" section showing 36 contributors with their profile pictures.

- >> ZIO is a library for asynchronous and concurrent programming that is based on pure functional programming for the Scala programming language.
- >> Core ZIO Library
- >> Multiple associated projects which either enhance ZIO features or use ZIO to solve a technical problem
- >> Have a complete solution using ZIO

Choosing a ZIO Project to contribute too

- >> Visit our organization on GitHub:
<https://github.com/zio>
- >> Review each projects README and Issue Tracker
- >> Look for issues labeled good first issue or documentation
- >> Look for new projects
- >> Low activity projects
- >> Projects discord channel

Project	Description	Language	License	Stars	Issues	Pulls	Last Updated
zio-nio	A small, unopinionated ZIO interface to NIO.	Scala	Apache-2.0	43	94	10	5 hours ago
interop-guava		Scala	Apache-2.0	5	2	0	5 hours ago
interop-twitter		Scala	Apache-2.0	10	11	0	8 hours ago
zio-s3	An S3 client for ZIO	Scala	Apache-2.0	9	19	0	8 hours ago
zio-web	ZIO-powered cloud services via HTTP and other protocols	Scala	Apache-2.0	26	126	4	9 hours ago
zio-telemetry	ZIO-powered OpenTelemetry library	Scala	Apache-2.0	16	56	6	9 hours ago
zio-query	Add efficient pipelining, batching, and caching to any data source	Scala	Apache-2.0	10	65	1	9 hours ago
zio-process	A simple ZIO library for interacting with external processes and command line	Scala	Apache-2.0	4	65	4	9 hours ago

Starting a new ZIO Project



```
$ sbt new zio/zio-project-seed.g8
```

- » Contribute a new project to the ZIO eco-system
- » Giter8 project seed
 - » Code structure
 - » Build process and CI
 - » Base dependencies and sbt plugins
 - » Microsite included !

Your new ZIO Project

ZIO Project

ZIO Org on GitHub

ZIO Org on Maven

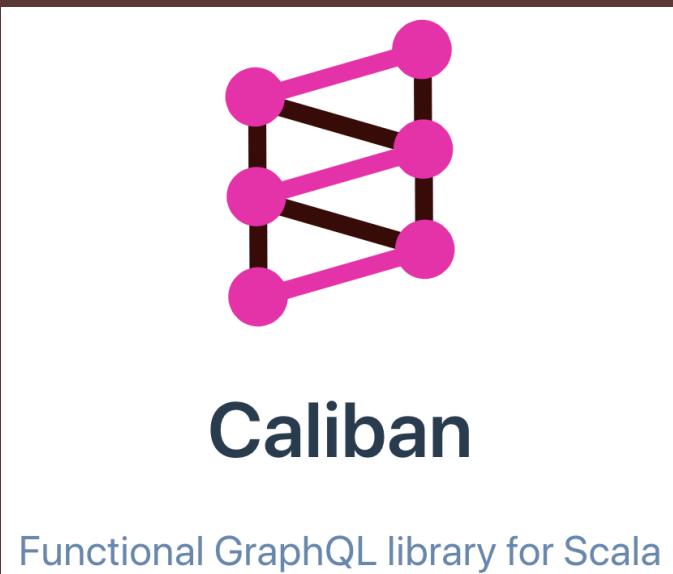
ZIO Discord Channel

Community Project

Own Org on GitHub

Own Org on Maven

Community Discord Channel¹



¹ By invitation only, reviewed on a cases by case only.

Devops, infrastructure & Builds Lair

- » JDK Supported: **Java 8 , Java 11**
- » Scala Versions Supported: **2.12.x , 2.13.x & Dotty**
- » Optional support for Scala **2.11.x**
- » CircleCI used for all project builds
 - » Plan to migrate to GitHub Actions soon
- » All repos on merge to master create a snapshot maven release
- » Official Releases use semver versioning and GitHub Release tagging
- » Official releases only result in the microsite to be updated
- » To get help ask in **#devops-lair** channel on ZIO Discord (<http://sca.la/ziodiscord>)

Documentation microsite

- » Scalameta mdoc (<https://scalameta.org/mdoc/>) in conjunction with Docusaurus (<https://docusaurus.io/>)
- » Core ZIO Library microsite deploys to <https://zio.dev>
- » All other projects deploy to GitHub pages: [https://zio.github.io/zio-\[project\]/](https://zio.github.io/zio-[project]/)



Contribution Etiquette and Collaboration

Working on an issue

Pull Requests



Learning and Getting Help

- »> GitHub issues
- »> GitHub Pull Requests
- »> Discord
 - »> #zio-users
 - »> #zio-contributors
- »> Each other project have their own channel

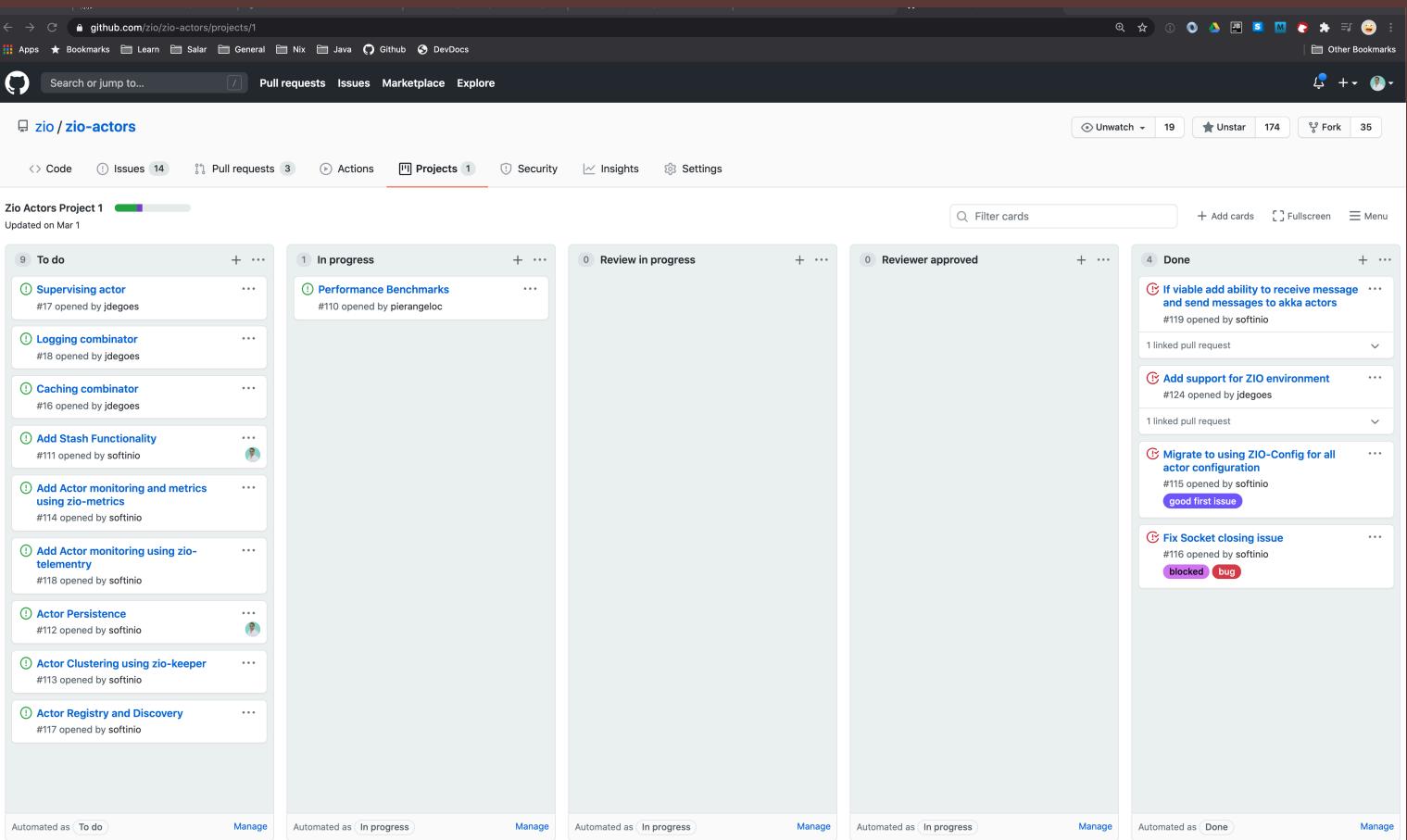
Additional Resources to help contributors

- >> ZIO Contributor Guidelines - https://zio.dev/docs/about/about_contributing
- >> ZIO Coding Guidelines - <https://zio.dev/docs/about/aboutcodingguidelines>
- >> ZIO Code of Conduct - https://zio.dev/docs/about/about_coc

Projects I am looking for Contributors for

ZIO Actors

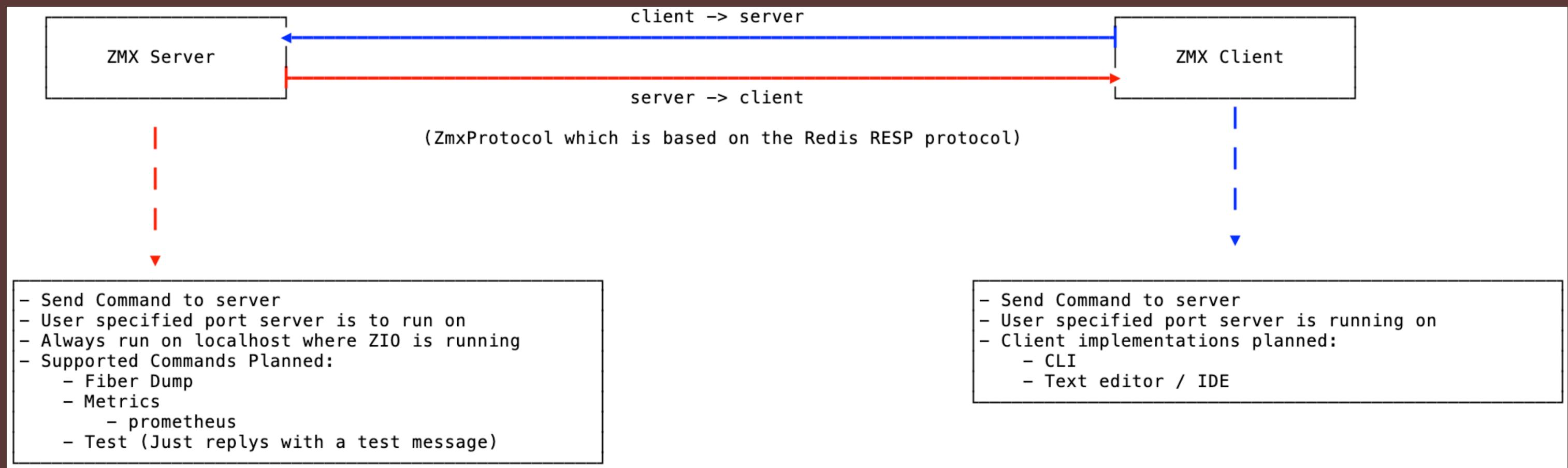
- » High-performance, purely-functional library for building and supervising typed actors backed by ZIO
- » <https://zio.github.io/zio-actors/>



ZIO ZMX

» Monitoring, Metrics and Diagnostics for ZIO

» <https://zio.github.io/zio-zmx/>



Learning Resources

>> <https://zio.dev/docs/resources/resources> (Resources menu option at <https://zio.dev>)

>> Training by <https://ziverge.com/>

>> John A. De Goes Patreon membership: <https://www.patreon.com/jdegoes>

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Follow me on Twitter: @SalarRahmanian – Blog: <https://www.softinio.com>

Resources

If you find a new great library, talk, resource, slides or project, related to ZIO, consider adding to the list with your PR

Blog Articles

These articles reflect the state of ZIO at the time of their publication. The code samples might be outdated, considering ZIO was early in development at the time they were written. However, the concepts are still relevant.

- Streaming all the way with ZIO, Doobie, Quill, http4s and fs2 by Juliano Alves (June 2020)
- Building a cool CLI with Decline for my ZIO App by Pascal Mengelt (May 2020)
- Building the Death Star with ZIO Stream by Juliano Alves (May 2020)
- uzhttp + sttp for light-weight http and websockets by Tim Pigden (April 2020)
- Effective testing with ZIO Test (RC18) by Pavels Sisojevs (April 2020)
- ZIO with http4s, Auth, Codecs and zio-tests (RC18) by Tim Pigden (April 2020)
- ZIO + Http4s: a simple API client by Juliano Alves (April 2020)
- How to write a concurrent LRU cache with ZIO STM by Jorge Vasquez (March 2020)
- Testing background process with ZIO by François Armand (March 2020)
- Example of ZLayers being used in combination by Tim Pigden (March 2020)
- From idea to product with ZLayer by Pavels Sisojevs (March 2020)
- Spring to ZIO 101 - ZIO CRUD by Adrian Filip (March 2020)
- What are the benefits of the ZIO modules with ZLayers by Pascal Mengelt (March 2020)
- Effective testing with ZIO Test (RC17) by Pavels Sisojevs (January 2020)
- Implement your future with ZIO by Pavels Sisojevs (December 2019)
- Decouple the Program from its Implementation with ZIO modules. by Pascal Mengelt (December 2019)
- How to write a command line application with ZIO? by Piotr Gołębiewski (November 2019)
- What can ZIO do for me? A Long Polling example with sttp. by Pascal Mengelt (November 2019)
- Simulating IoT Events with ZIO Streams by Tim Pigden (November 2019)
- Speeding up time with ZIO TestClock by Tim Pigden (October 2019)
- Functional dependency injection in Scala using ZIO environments by Chiel van de Steeg (October 2019)
- Making ZIO, Akka and Slick play together nicely by Jakub Czuchnowski (August 2019)
- Wrapping impure code with ZIO by Pierre Ricadat (July 2019)
- Combining ZIO and Akka to enable distributed FP in Scala by Pierre Ricadat (July 2019)
- tAPIr's Endpoint meets ZIO's IO by Adam Warski (July 2019)
- ZIO with http4s and doobie by Wiem Zine El Abidine (June 2019)
- Thread shifting in cats-effect and ZIO by Adam Warski (June 2019)
- Exploring the STM functionality in ZIO by Fredrik Skogberg (May 2019)

Lessons Learnt

- » Anyone Can be a contributor
- » Focus your library on satisfying user experience and their needs
- » Power of the group
- » ZIO Community is very welcoming and supportive
- » Learn by helping others
- » Learn and Gain Experience
- » Make a of new friends all around the world
- » Microsite CI build will always randomly fail when least expected 😅

Thank you