

CAREER

Paack

Tech Lead / Senior Software Engineer

BARCELONA, SPAIN

2021-Present

As Tech Lead / Senior Software Engineer at Paack, I'm leading the operation pillar overseeing 5-6 Software Engineers. Based on microservices and developed with Go the platform is handling thousands of concurrent transactions.

I work on the design and implementations of all software of operations pillar and help to guide best-practices adoption across the company.

- I enhanced p99 response time by 12x of our APIs and reduced CPU utilisation to 70%. Achieved a 65% improvement in SQL CPU utilisation, resulting in a p99th percentile response time of 15ms.
- Led a large-scale service migration from Kubernetes to Google Cloud Run for all operation pillar services, reducing infrastructure costs by 30%.
- Designed and developed a [generic automated sorting management system](#). Currently supporting more than 12 different automated sorters, achieving a 99th percentile response time of 140ms and 99% accuracy.
- Designed and implemented a global sorting algorithm to reduce parcel sorting costs by 8-12% per delivery. The algorithm sorts the packages based on dynamic rules like priorities, lead time ...

Cross-Squad initiatives:

- I worked in building **observability platforms** with Opentelemetry in Python and Golang, integrating it with GCP Tracer and Prometheus.
- I worked with the rest of the lead in the definition and implementation of a basic toolkit using Go generics to automate the setup of app services. The toolkit simplifies the creation of new microservices and automates observability and maintenance. The kit includes:
 - Internal event handler Development: I designed and implemented an **internal event dispatcher module** using a 2-tier channel system, capable of supporting 1.5 million events per hour.
 - Other tools: Definitions of use case handlers using generics, pubsub brokers, publishers, and templates for starting a Go project ..

Stack: Golang, GraphQL, PostgreSQL, CQRS, PubSub, Redis, Prometheus, BigQuery

Pattern: Microservice Architecture

Banca March
Soft. Engineer

MALLORCA, SPAIN
2020-2021

- I worked on a new scalable data loading mechanism, moving from batch to real-time with scala. The new system increased the reliability and ingestion speed using technologies such as Kafka, CDC Informatica, Cloudera Platform, and Spark.
- Additionally, I led the integration of a new authorization and authentication service to validate banking operations by voice as part of the [Nuance project](#).

Stack: Spring Boot, Angular, Spark, Hue, Kafka, Jenkins, MongoDB
Pattern: Microservice Architecture

Top Doctors
Soft. Engineer

BARCELONA, SPAIN
2017-2020

Contributed significantly to Top Doctors migration project from legacy to cloud, implementing a REST API architecture with a modular monolith using Domain-Driven Design (DDD). Key achievements include:

- Building foundations for the next-gen web app using Vue.js/Nuxt.js, following Flux architectural patterns and Lazy Loading Design Pattern.
- Frontend and backend tasks with a focus on high performance, including query analysis, optimization, and asynchronous systems.

Stack: Golang, Vue, Postgresql
Pattern: Api Rest Architecture

Glifstock
Junior Soft. Engineer

MALLORCA, SPAIN
2016-2017

Contributed to the development of a cloud-native platform for secure and encrypted file storage. Rolled out and maintained a back-office platform using frameworks like AngularJS and Laravel.

Stack: PHP, Mysql, Angularjs, S3, Memcache
Pattern: Monolith Architecture

EDUCATION

Bachelor Degree - Computer Engineering

2013-2017

[University of the Balearic Islands](#) (Spain)

Distinction on: "Database system and management".

Master Degree - Computer Engineering

2018-2019

[University of Granada](#) (Spain)

Merit on: "Soft Computing Techniques for Learning and Optimisation",
"Neural Networks and Metaheuristics", "Big Data" and "Data Mining".

Thesis: "Analysis of processes of diffusion of innovations based on
purchasing preferences and social relations of consumers through ABM (Agent-based development) "