

# Fernando González Cortés

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## Education

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Master's degree in Software Engineering      Universidad Politécnica de Valencia, Spain      June 2003

Fluent in English, French, German and Spanish.

## Employment

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Scaleway (lead French cloud provider), Remote from Spain      January 2023 – Present  
*Devops Engineer*

- Implementation of a serverless database product. Currently entering private Beta.
- Development of a functional proof of concept in a team of three developers.
- Added FerretDB support to the *managed database* product.

Juni Technology AB (Swedish fintech), Remote from Spain      April 2022 – December 2022  
*Software Engineer III*

- Development and maintenance of the backend supporting the *Know Your Business* (KYB) process that takes place during customer on-boarding.
- Customer support.

Toptal (top 3% freelance network), Remote from Spain      November 2021 – March 2022  
*Software Engineer*

- Developed client libraries for different cryptocurrency exchange APIs, for Menai Financial Group.

Parknav (real time parking), Remote from France      February 2019 – December 2020  
*Staff software engineer*

- Responsible for the company CI/CD pipelines testing and deploying services in the K8s production cluster
- Responsible for monitoring production services.
- Replaced an Azure API gateway by Kong Ingress, saving the company 2000\$/month.
- Reduced cluster memory requirements by 50% by optimizing memory usage in data intensive services.
- Built a garage pricing API from beginning to end: implementation, testing, deployment, figuring out and implementing pricing models, etc.
- Applied machine learning models to partially automate the migration from map data between two Open Street Map versions, which allowed to upgrade the city maps more regularly at a lower cost.
- Developed several data portals: <https://portal.parknav.com>, <https://places.parknav.com>

Several clients, Remote from France      October 2016 – December 2018  
*Freelance*

- Developed a collaborative map (<https://www.bankgeheimnisse.ch/map>) for the Association for the promotion of Swiss bench culture, to document benches in Switzerland. The map has more than 20.000 benches at the moment.
- Developed on my own initiative a real time map of public transport speed in Pays de Gex / Geneva showing current status, past data and 24 hours of predictions.

FAO United Nations, Rome, Italy & Remote from Germany  
*Geospatial Software Engineer*

January 2013 – September 2016

- Developed a web application to publish country national forest data in the context of the different national REDD programs (***Reducing Emissions from Deforestation and Forest Degradation***). Deployed the application in Argentina, Paraguay and Ecuador.
- Fixed GeoServer bug: <https://osgeo-org.atlassian.net/browse/GEOS-7243>.

Several clients, Remote from Spain  
*Freelance*

September 2008 – December 2013

- Developed an Android app for a collaborative mapping platform.
- Developed a web tool to plan geotechnical studies for the Valencian Institute of Building.
- Built an application for image quality control in the context of the National Plan for Aerial Orthophotography in Extremadura region, Spain.
- Developed a query language to process spatial data regardless of its location (database, file, web service) or format (shapefile, GML, PostGIS, TIFF, JPEG, etc.).

IRSTV-CNRS FR2488, Nantes, France  
*Job Title*

April 2007 – July 2008

- Development of a pseudo-SQL engine middleware to query data in different formats and locations.

University of Castilla-La Mancha, Albacete, Spain  
*Freelance*

March 2005 – March 2007

- Different projects related with webmapping and GIS desktop applications.

IVER T.I., Valencia, Spain  
*Junior Software Engineer*

March 2002 – December 2004

- Developed the core of gvSIG, an open source desktop GIS application

## Technical Skills

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- *Programming languages*: **Java** and **Golang**. In a lesser degree Javascript and Python. **Bash** enthusiast.
- *CloudProviders*: I have worked with several **GCP** products during my stay in Parknav: Pub/Sub, Cloud Build, Cloud Storage, etc. Currently working at a cloud provider and learning the cloud from the inside.
- *Devops tools*: At the moment I am provisioning resources with **Terraform** and deploying services with **Ansible**.
- *Deployment*: I am at ease working with **K8s**. I have installed Ingress controllers (**Kong**, **Traefik**), configured service accounts, deployed cronjobs, etc. Currently working a lot with **Docker**.
- *Monitoring*: I have set up logging aggregation using **Fluentbit**, **Elasticsearch** and **Kibana**. I am used to browse metrics and logs and set up alerts.
- *CI/CD*: Frequent user of CI/CD pipelines. I have set them up myself in **Gitlab** and **GCP Cloud Build**.
- *Distributed architectural patterns*: I have worked with **event sourcing**, solved consistency

issues with idempotent operations and orchestrators (**temporal.io**), implemented self-healing **feedback loops**, asynchronous communication through messaging brokers, etc.

- *APIs*: I've written multiple **REST** APIs and I am also familiar with the **gRPC** interface.
- *Data*: **PostgreSQL** in depth (configuration, wire protocol). I have also used MySQL, Redis and many different messaging solutions (**NATS**, **Kafka**, **RabbitMQ**).
- *Frontend*: Used **React** extensively in the past. And many old technologies lost in the mist of time.
- *Machine Learning*: I have a small theoretical background on statistics and have created different models to predict road traffic, match data from two different databases, among others. Used **WEKA**, and **R**.
- *Geospatial*: I have worked many years with geospatial technologies: PostGIS, OSM, Mapbox, GeoServer, Leaflet, GDAL.

## Passions and Hobbies

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- *Drums*: I play drums. Was a drum teacher for a year.
- *Nature & Sports*: Sports in nature (Running, Climbing, Hiking)
- *Raspberry Pis*!

## References

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Provided upon request