

# Felipe ESPINOZA

## PERSONAL DATA

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FIRST NAME: Felipe Alejandro  
LAST NAME: Espinoza Rosales  
EMAIL: [cv@espinoza.dev](mailto:cv@espinoza.dev)  
PERSONAL SITE: [fdns.github.io](https://fdns.github.io)  
RIGHT TO WORK: United Kingdom

## WORK EXPERIENCE

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- JAN 2019  
PRESENT | *Senior Software Engineer, Online Education, Universidad de Chile.*
- Containerize with **Docker** an **Open edX** (Open source learning platform) instance installed in a single virtual machine, distributing it in multiple servers to handle ten times the current users.
  - Setup monitoring with **Prometheus**, **Grafana** and **Alertmanager** for metrics, **Elasticsearch**, **Logstash** and **Graylog** for logs.
  - Migrate the application to a **Kubernetes** cluster, setting up CI/CD with **Github Actions** and **ArgoCD** to deploy new changes automatically, while using **Terraform** and **Ansible** to configure new instances locally and in **AWS** Cloud.
  - Develop new integrations and analytics processing for the platform using **Python** (**Django** framework), mentoring new developers that joined our team to expand the capabilities of the platform.
  - Manage a team of software engineers to scale and add new features to our **Open edX** platform.
- JUL 2017 | *Researcher at NIC Chile Research Lab.*  
JAN 2019 | Research in highly scalable DNS monitoring systems and the AnyCast networks of NIC Chile.
- DIC 2016 | *Developer at Vigigo SpA.*  
ABR 2017 | Design and implement integration between different database systems and SAP for CODELCO.
- JAN 2016 | *Developer at Google Inc.*  
APR 2016 | Design and implement projects to improve Google Deployment Manager.
- DEC 2014 | *Developer, Project Leader at Penta Analytics S.A.*  
FEB 2015 | Design and implement the extraction process in an ETL system.
- JUL 2014 | *Programming teacher at University of Chile*  
OCT 2014 | C teacher, class of 20 students aged 15 to 18.

## CONFERENCES

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- JUL 2018 | *IETF 102 Montreal.*  
Speaker: *Monitoring DNS with open-source solutions.*
- MAR 2018 | *SREcon18 Americas Conference.*  
Speaker: *Monitoring DNS with Open-Source Solutions.*

## EDUCATION

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- 2018 | **Master in Computing Science**, University of Chile, Santiago, Chile  
2019 | Maximum distinction. Thesis: Geographical and Topological Analysis on Routes and Server Selection of DNS Anycast Clouds.
- 2012 | **Computing Engineering**, University of Chile, Santiago, Chile  
2018 | Maximum distinction. Thesis: Real time monitoring of DNS using open source solutions.

## CERTIFICATION

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- FEB 2021 | **CKAD: Certified Kubernetes Application Developer**, The Linux Foundation  
Certificate ID: [LF-0pcjovkn4a](#)
- MAR 2021 | **CKA: Certified Kubernetes Administrator**, The Linux Foundation  
Certificate ID: [LF-pt10ndf5sw](#)

## LANGUAGES

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- SPANISH: Mothertongue  
ENGLISH: Fluent

## PROGRAMMING KNOWLEDGE

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- Intermediate: PYTHON, RUST, GO, SQL, JAVA  
Basic: BASH, HTML, JAVASCRIPT, CSS, C++

## SOFTWARE AND PLATFORM KNOWLEDGE

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- Orchestration: Kubernetes, Nomad.  
Containers: Docker, containerd, Docker Compose.  
Version Control: Git, SVN.  
Operating Systems: Linux.  
CI/CD: Argo CD, Concourse, Ansible, Terraform.  
Databases: MySQL, SQLite, Postgres, ClickHouse, ElasticSearch.  
Monitoring: Graylog, Prometheus, Grafana.  
Cloud Platforms: AWS, GCP.