# Felipe ESPINOZA

## PERSONAL DATA

FIRST NAME: Felipe Alejandro
LAST NAME: Espinoza Rosales
EMAIL: cv@espinoza.dev
PERSONAL SITE: fdns.github.io
RIGHT TO WORK: United Kingdom

#### **WORK EXPERIENCE**

#### 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 the ellite 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

## **CONFERENCES**

JUL 2018 | IETF 102 Montreal.

Speaker: Monitoring DNS with open-source solutions.

MAR 2018 | SREcon18 Americas Conference.

OCT 2014 | C teacher, class of 20 students aged 15 to 18.

IUL 2017 | Researcher at NIC Chile Research Lab.

Speaker: Monitoring DNS with Open-Source Solutions.

#### **EDUCATION**

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**

FEB 2021 | CKAD: Certified Kubernetes Application Developer, The Linux Founda-

tion

Certificate ID: LF-0pcjovkn4a

MAR 2021 | CKA: Certified Kubernetes Administrator, The Linux Foundation

Certificate ID: LF-pt10ndf5sw

#### LANGUAGES

SPANISH: Mothertongue

ENGLISH: Fluent

## PROGRAMMING KNOWLEDGE

Intermediate: PYTHON, RUST, Go, SQL, JAVA

Basic: BASH, HTML, JAVASCRIPT, CSS, C++

## SOFTWARE AND PLATFORM KNOWLEDGE

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.