

FRANCESCO CHEINASSO

Computer engineer

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EXPERIENCE

Kubernetes Developer & Cloud Network Designer

Liqa.io (Thesis)

📅 March 2022 – Ongoing 📍 Turin, TO

In my thesis I worked for Liqa.io, a project born in the Polytechnic of Turin, which allows to enable multi-cluster topologies in Kubernetes. During the thesis my main tasks have been:

- Redefine Liqa network for a multi-cluster environment, with minimum dependencies. A **POC** has been implemented using **Linux Network Namespaces**, **IpTables**, and **Policy Routing**.
- Develop a mechanism to check cross-cluster network connectivity in real time. This has been implemented inside a **Kubernetes operator** with **controller-runtime** and **kubebuilder** framework, using **Go** language.
- Allow Liqa monitoring for cross-cluster network using **Prometheus** and **Grafana**
- Extend **Liqctl** (the Liqa CLI tool) to show status information about a Liqa installation and connected clusters. **Go** language and **Cobra** have been used.

Kubernetes Developer

Crownlabs

📅 September 2021 – April 2022 📍 Torino, TO

Crownlabs is a platform developed in the Polytechnic of Turin, it allows to run **GUI applications as a service** in a **Kubernetes** environment using a **Web Frontend**. During the project my main tasks have been:

- Implement a solution to add, deploy and manage generic applications in Crownlabs. **Golang** and **controller-runtime** have been used to implement those features inside a **Kubernetes operator**.
- test developed features using **GinkGo** framework.
- package **VSCode Server** and **Jupyter Notebook** in a **Docker container** to provide Demo applications to show the developed features.

Frontend Developer

Crownlabs

📅 May 2021 – April 2022 📍 Torino, TO

Crownlabs is a platform developed in the Polytechnic of Turin, it allows to run **GUI applications as a service** in a **Kubernetes** environment using a **Web Frontend**. During the project my main tasks have been:

- Design and implement the Crownlabs frontend using **React.js**, **Ant Design** and **Tailwind**. The chosen language have been **Typescript**
- React components have been documented using **Storybook.js**
- Interaction with **Kubernetes API** have been managed with **GraphQL** and **Apollo Client**.

Peer Mentor - Computer Science Course

Polytechnic of Turin

📅 September 2021 – January 2022 📍 Torino, TO

Helped students during Computer Science's course laboratories, teaching **Python** and **Problem Solving**

LANGUAGES

English

First: B2



TECHNICAL SKILLS

Languages

Shell Scripting Bash C/C++ Python
Java Kotlin Javascript/Typescript Matlab

Cloud

Kubernetes Helm Docker Golang
Prometheus Grafana

Frontend

React.js Bootstrap Ant Design Tailwind

Backend

Spring Kafka MQTT GraphQL SQL

System and CI/CD

Linux Networking Git Github
Github Actions

SOFT SKILLS

Team work Positive Curious
Communicative Autonomous
Helpful Empath

JOBS

Warehouse worker

Selebo Falegnameria Sas

📅 Jul 2016 - Aug 2016 📍 Sanfront, CN

EDUCATION

Master's degree in Computer Science

Polytechnic of Turin

📅 Sep 2020 – Dec 2022 📍 Torino, TO

Bachelor's degree in Computer Science

Polytechnic of Turin

📅 Sep 2016 – Jul 2020 📍 Torino, TO