

# ALEJANDRO SUÁREZ

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## SUMMARY

Software engineer with a Master's degree in Web Engineering and over three years of experience with fluent speaking in Spanish and English, seeking a dynamic environment where to learn and participate in the development of new technologies that present a challenge and make everyone's life easier.  
Autonomous • Creative • Results oriented

## EDUCATION

### UNIVERSITY OF OVIEDO

Oviedo, Spain

Master's degree in Web Engineering

Sep '17 – Jun '19

- Certified European Master (Euro-Inf)
- JavaScript, CSS and HTML5 API • Web services • Web frameworks • Web security and penetration testing • Data mining and semantic web • Machine learning • Non-relational databases • Oracle • Design patterns • Web servers (Apache and Nginx) • Project Management (ITIL) • System administration • Android and Kotlin

### CORK INSTITUTE OF TECHNOLOGY

Cork, Ireland

Software Engineering

Jan '19 – Jun '19

- Erasmus scholarship
- Progressive web applications • Big Data (Spark and Hadoop) • Drupal • Python • Graphic Design

### UNIVERSITY OF SANTIAGO DE COMPOSTELA

Santiago de Compostela, Spain

University degree in Computer Science

Sep '12 – Sep '16

- Databases • Operating systems • C • Java • SQL • Linux and Shell scripting • Project Management (PMBOK)

## PROFESSIONAL EXPERIENCE

### CERN – Beams department – Particle accelerator in Switzerland \*

Geneva, Switzerland

Software engineer / System administrator

Nov '20 – Jan '22 (1 year 3 months)

- [Design and development of a backend and tools that automates sys admin tasks](#), as well as administration of Linux systems that control hardware for the accelerator • Python, FastAPI, REST, SOAP, Ansible, CI/CD

### ENXINE – IoT specialized company

Santiago de Compostela, Spain

Backend developer

Oct '19 – Sep '20 (1 year)

- Maintenance and development of new functionalities inside the Backend System which controls and monitors electrical car chargers • NodeJS, REST, Websockets, Redis, PostgreSQL.

### OVERON – Telecommunications company

Remote

Software engineer – Remote work project – Internship

May '18 – Oct '18 (6 months)

- Development of a transcoder that transforms an audio/video/subtitle signal of any origin and format to a playable format by any web browser • GoLang, FFmpeg, JavaScript

### CONNECTORS – International mobility company

Vigo, Spain

Full Stack engineer - Internship

Jan '17 – Jun '17 (6 months)

- Development of a multiplatform social network which promotes contact between mobility participants as well as improves the communication between the company and their clients • Java, Spring, React, PostgreSQL

### JONARO – Amazon provider

Cambridge, United Kingdom

Software engineer - Apprentice

Jun '16 – July '16 (2 months)

- Development of a software which automatizes processes like keeping product stock control, saving orders registry or generating and printing shipping tags • Java, Java Swing, PostgreSQL.

## ADDITIONAL INFORMATION

Languages	Spanish • English
Programming languages	C • Java • JavaScript/TypeScript • SQL • Python • Rust • HTML • CSS
Databases	PostgreSQL • MySQL • Redis
Frameworks	Spring Boot • NodeJS • React • React Native • Vue • Nuxt
Other technologies	Linux • Git • Ansible • Machine Learning • Bash • Docker • FFmpeg
Hobbies	Thinking • Music • Getting away from the routine • Solving problems
Additional experience	Teaching programming • Electronic devices repairing • Personal projects

\* References available upon request

## PROJECTS

### Accadmlib

CERN

Design and development of a library that includes a range of CERN API integrations and tooling that allows fast development of scripts without dealing with all CERN services and integration methods.

The module could be operated through a command line with an automatically-generated set of commands, a Python script importing it as a Python module, or a REST service by deploying its integrated web server. Those 3 methods allow several authentication methods: JWT, Kerberos, CERN RBAC, or Netrc.

The framework included monitoring mechanisms such as exposing an HTTP endpoint with information that is ingested and composed by Prometheus to finally be sent to Grafana or a Mattermost bot that automatically sends a message to a group in case an error occurs. • Python, Grafana, Prometheus, Kerberos, REST, SOAP

### Accadmlibclient

CERN

Design and development of the CLI applications that consumes the REST services provided by Accadmlib. Includes tooling for creating virtual machines, inserting and configuring new hardware in different services, configuring servers networks, updating databases on hardware replacement, automatically adding nodes into clusters, and other tasks related to the department. • Python, REST services, Kerberos

### ROG (Remote operations gateway)

CERN

<https://rog.cern.ch/>

Deployment and maintenance of the FastX cluster of Linux remote desktop as well as the creation of the corresponding Ansible roles necessary for its automatic deployment.

The cluster's purpose is to offer operators the ability to open a Linux session from anywhere inside the Technical Network to access the software that monitors and controls the particle accelerator.

Fastx: [https://gitlab.cern.ch/acc/infra/ansible/cs8\\_common/-/tree/master/fastx](https://gitlab.cern.ch/acc/infra/ansible/cs8_common/-/tree/master/fastx)

Kernel modules for sec team: [https://gitlab.cern.ch/acc/infra/ansible/cs8\\_common/-/tree/master/sectools\\_it](https://gitlab.cern.ch/acc/infra/ansible/cs8_common/-/tree/master/sectools_it)

### VPC (Virtual private computers)

CERN

Maintenance and automation tasks of the virtual machines created in the OpenStack cloud.

### Infrastructure automation

CERN

Creation and design of the structure and CI/CD automation mechanism of the following repository <https://gitlab.cern.ch/acc/infra/ansible> which is responsible for configuring and installing the required software on the accelerator CentOS Stream 8 machines.

### python-cli-generator

Personal project

Oct '22

<https://github.com/AlexSua/python-cli-generator>

Python library that automatically generates a CLI given a class, a function, a list, or a dictionary. Among its features, the library has a processor that auto-instantiates classes and sets parameters from the arguments inserted through the command line that, combined with an output processor, gives you the possibility to develop tools quickly. The library achieves a better performance in long applications than raw argparse thanks to its capability to detect and process only the required arguments. • Python

### one-link-videochat

Personal project

Aug '22

<https://alejandrosuarez.eu/videochat>

A small multiplatform video chat application that allows keeping a peer-to-peer secure conversation with anyone by sharing only one link, without the need of installing any application or creating an account.

The video chat includes hand recognition which makes you able to draw in the screen remotely to another person by enabling the option and by putting your fingertip and thumb together. • Vue, JavaScript, WebRTC, TensorFlow

### rust-websocket-relay

Personal project

Jun '22

<https://github.com/AlexSua/rust-websocket-relay>

A lightweight and resource-friendly relay server to easily communicate two applications using WebSockets

• Rust, Actix

### alejandrosuarez.eu

Personal project

Mar '22

<https://alejandrosuarez.eu>

Personal web page and blog that pretends to be a compilation of the knowledge I am acquiring as a software engineer. • Nuxt, Vue, JavaScript

### price-comparator/web-crawler

Personal project

May '20

WebCrawler with multi-threading and proxy rotation. It extracts information on prices from different web pages.

• Java, PostgreSQL