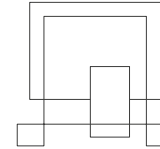**CERN – European Organization for Nuclear Research**

Internship

August 2021 – January 2022

1st Assignment

Learning objectives

Franciska-Leonóra Török (ICT 293171)

Software Technology Engineering

5th Semester

31.01.2022

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Preface

Initially, the position that I have applied to is called **Technical Studentship** (1 year) – whereas the first 6 months has been accepted at VIA as internship. The project that I have been assigned to have become the topic of my future BCs thesis.

In order to separate my BCs thesis from my internship work, Maria Dimou, my CERN supervisor suggested the following:

> *Everything that is potentially beneficial for the CERN project and/or useful for professional and personal uses in my future career, several technical and managerial courses must be taken.*

Hence the leading focus will be on the courses and new skills that have been obtained during the 6 months at CERN.
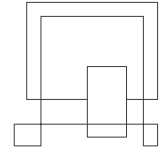
Expectations

Since CERN, the European Organization for Nuclear Research is one of the world's largest and most prestigious scientific research centres, I was thrilled to explore it as soon as I arrived.

They operate the largest particle physics laboratory in the world, and the world's largest and highest-energy particle collider, the **Large Hadron Collider (LHC)** that I could only see it before from distance until I joined CERN.

Sincerely, a scientific research centre was only a dream, especially CERN, that looked extremely distant from me, and I have never thought that I could ever join it, but here we go.

CERN has the best experts within the field of physics, engineering, and technology. Hence it is the ideal place to gain valuable skills and experience from.
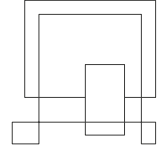
Learning objectives

As a student, I was looking for practical training in domains related to Information Technologies and/or Software Engineering where I will have the opportunity to work at the cutting edge of technology, contribute and broaden my knowledge in areas such as web applications, virtualised infrastructure development, distributed computing, databases, software development or system administration, using the most common programming and scripting languages.

Given the project that I have been assigned to, CERN provided a UDEMY license with related e-learning courses to expand my knowledge and gain more skills that could be potentially useful for the future.

The learning process includes the Linux system administration, React, Django, Python, Typescript, Kubernetes, OpenShift, and the CERN Web Frameworks. Besides the UDEMY courses, I have also been able to follow the CERN's French Language courses.