



Graduation Internships Book

2023 Edition

That which is of **value**, must remain of **value**

www.cedgroup.eu

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Who we are ?

**CED is the leading european
tech calim management
and expertise company**

What de we do ?

We provide expert services & tech enabled solutions to help our clients manage claims or large calamities by delivering innovative combinations of people and technology

Who are our clients ?

Insurers & bankinsurers, Insurance distributors, Public authorities/ bodies, Mobility co's (e.g. leasing), Property co's (e.g. housing corporations), Vitality co's (e.g. hospitals)%

Where do we operate ?

We operate in 4 core countries: Netherlands (45%), France (35%), Belgium (8%), Spain (7%), Rest of Europe (5%)

Client – centric


We were created by our clients in 1971; co-creation of claim services & solutions with our clients is in our DNA. We think like our clients, aiming at innovation, cost containment & efficiency, speed and end customer satisfaction%

Caring for people

We are relentlessly focused on creating unmatched claim experiences for the end customers, delivered by caring and competent people empowered by technology. We evaluate ourselves based on end customer feedback (NPS). We are committed to a sustainable future%

Innovative

We differentiate ourselves through innovation and technology. Every year, we invest >5% of turnover in digital and intelligence solutions to empower our customers and our own experts. We own industry-leading digital assets



**We are
client – centric
caring for
people and
innovative**

Our partners

Partners with which we had the honor to work. We believe that all our projects succeed because we don't choose easy and faster ways.



+100 more

Our location

+10

Locations

+800

Collaborators

What opportunities are offered to our PFE interns?

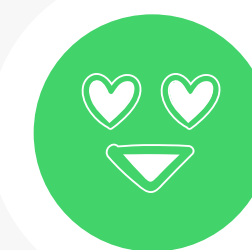
Carrying out your PFE internship at CED means having the opportunity to be part of a very dynamic and diverse team, where you will be accompanied, trained, and guided throughout your internship to help you gain skills and reveal your full potential.



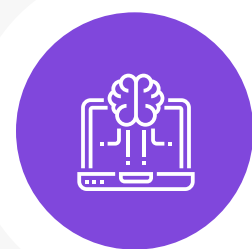
Support and regular follow-up



Peer-Mentoring



Friendly environment and agile culture



Learning advanced technologies



Several hiring opportunities



Technical and soft skills workshops

What do our previous interns say ?



Jawher Zagrouba

Full stack Developer - [ISI Tunis](#)

My time as an intern at CED Group was pretty beneficial to me on multiple levels. I have learned so much and appreciate the time my supervisors spent teaching me new skills and useful strategies. I feel I am ready for the next steps that will bring me closer to my goals.



Boutheina Guirat

Full stack Developer - [ENSI](#)

I had the opportunity to have my end of study internship at CED. The project was very interesting and the supervision was qualified which allowed me to get my diploma. I had the chance to be hired and work with helpful and enthusiastic team as a Full Stack Engineer.



Manef Tira

Full stack Developer - [ENSI](#)

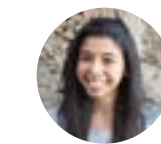
I'm glad that I got the opportunity to do my internship in this company. It's really great how welcoming the CED team is. Thanks to them and greater supervision I had a smooth running of my internship throughout the duration of the project and a lot of opportunities to learn.



Dhekra Gharbi

Junior BI Developer - [ENSI](#)

I was well supervised during this, which allowed me to discover a professional environment of sharing and collaboration. CED gave me the opportunity to consolidate my knowledge. At the end of my internship I had the chance to join the company CED as a BI engineer.



Tasnim Ben Nfidha

Full stack Developer - [Esprit](#)

My internship experience was professionally stimulating and exciting. I had the chance to learn and work with the newest stacks and technologies which provided me the relevant experience to start my career with them as full stack engineer.



Wiem Turki

Junior BI Developer - [Esprit](#)

my experience as an intern at CED was so enriching as it gave me an amazing opportunity to consolidate my knowledge and to learn new skills. The work environment was pleasant. During this internship I reinforced my motivation to start a career in Business intelligence.

Selection process

We are looking for talented and ambitious students.
To apply, please follow the following steps

Send an email to the address :
chayma.nawali@ced.group
naoures.haloul@ced.group

Step 01

Email subject

First and last name - #Ref

Email body

Motivation letter and don't forget to join your CV pdf

Step 02

HR interview

Technical interview

Step 03

Step 04

Validation. Welcome to CED Adventure !

PFE Subjects

Development

- Reporting Delivery Solution.
- MCP Portal.
- Designing and implementation of an extranet.
- Designing and implementation of an API document generation.
- New Repair Monitoring Portal.

Business intelligence

- Group HR Dashboard.
- Customers reviews based on sentimental analysis of CRM claims and Social Network.

DevOps

- Automation of Azure resources provision.

Quality Assurance

- Script automation and integration in CI/CD pipeline.

01

Development

05 Projects

Subject 01

Reporting Delivery Solution

#CEDDEV1

Required Profile

Software engineering student

Skills / Knowledge

Angular

C#

HTML

SQL Server

Entity Framework

GIT

Azure DevOps

Number of interns

01

Duration of the internship

Between 3 and 6 Months

Main objective

The different projects in CED have a functionality generating documents (reports, invoices....) and delivery email based on templates model. For this purpose, we use different external solutions.

We want to create our own solution that meets our needs and combines the different services into one flexible solution.

Missions

Design and develop a web solution that offers the ability to :

- Create and design dynamic document or email templates using the project data to then generate the output as part of the application (pdf, email...).
- Send emails based on the template model.

Subject 02

MCP Portal

#CEDDEV2

Required Profile

Software engineering student

Skills / Knowledge

Angular

Kendo UI

C#

.Net6

Sql

Git

Azure DevOps

Azure B2C authentication

Number of interns

01

Duration of the internship

Between 3 and 6 Months

Main objective

The property claim handling in CED is processed with the application "Prospect".

The handling of cases is based on dossier creation which contains all parties, objects, damage information, etc.

The dossier will be divided into a set of assignments which will be registered, completed, executed, invoiced and reported to the customer based on agreements with the client.

To ensure communication between clients and CED, we need to create a new portal for our clients called "MCP".

Missions

Design and development of a web solution for insurers who are CED clients, allowing them to :

- Follow the progress of processing their dossiers.
- View dashboards and statistics.
- View documents.

Subject 03

Designing and implementation of an extranet

#CEDDEV3

Required Profile

Software engineering student

Skills / Knowledge

Angular

Dotnet Framework

Sql

Xamarin

Duration of the internship

Between 4 and 6 Months

Missions

Design and implement an extranet (web app and mobile application) to share services with the CED stakeholders (Clients/suppliers) :

- For Clients :
 - Sales Invoices information
 - Payment Information
 - Financial reports activity
- For Suppliers :
 - Purchase Invoices information
 - Payment information
 - Financial reports activity
 - Purchase Order information
 - Create a UBL Purchase invoice
 - Send UBL purchase invoice to FINCOM

Subject 04

Designing and implementation of an API document generation

#CEDDEV4

Required Profile

Software engineering student

Skills / Knowledge

Angular

Dotnet Framework

Sql

C#

Azure

Duration of the internship

Between 4 and 6 Months

Missions

Design and implement a document generation API and connect it to the Fincom project.

- Extract the dynamic data to be used.
- Implement the API using the chosen tools to generate the Sales Invoices, Purchase Invoices, Summary Statements and information letters.
- Store the generated documents in Azure storage accounts.
- Update and enhance the MDM user interface.

Subject 05

New Repair Monitoring Portal

#CEDDEV5

Required Profile

Software engineering student

Skills / Knowledge

Angular

Kendo UI

C#

.Net6

Sql

Git

Azure DevOps

Number of interns

01

Duration of the internship

Between 4 and 6 Months

Main objective

The repair handling in CED is processed with the application "New Repair".

The handling of cases is based on dossier creation by dossier coordinators which contains all data related to parties, objects, damages, etc.

The dossier will be composed of a set of working orders which will be created, assigned to repairers to be executed, then invoiced and reported to the customer based on agreements with the client.

In order to facilitate and organize the work of dossier coordinators and monitor the process of handling dossiers in New Repair, we need to develop a new portal for our dossier coordinators and their team managers called "New Repair monitoring portal".

Missions

Design and development of a web solution for :

- Dossier coordinators allowing them to :
 - Plan and organize the flow of dossiers handling
 - Follow the right process to handle dossier
 - Receive alerts regarding tasks expiry
- Team managers allowing them to :
 - Follow the progress of processing dossiers
 - View dashboards and statistics

02

Business intelligence

02 Project

Subject 01

Group HR Dashboard

#CEDBI

Required Profile

Software engineering student

Skills / Knowledge

Microsoft BI

SQL Server

SSIS

SSAS

Power BI

Number of interns

01

Duration of the internship

Between 4 and 6 Months

Main objective

Over the last few years, there has been a major change in the people management due to the recent events: epidemic situation, war, climatic changes, etc. That's why the productivity KPIs were impacted, and it should be crucial for the HR company managers to detect the absenteeism

The main objective of this final study project is to collect and define the business requirements of the HR and Finance managers, develop, and test a group dashboard of the basic HR KPIs.

Missions

This project requires the candidate to :

- Design and build the ETL packages to extract the data over all HR applications
- Develop and build the necessary sat, hub and links to be integrated in the Datawarehouse
- Create and validate the Cube and report based on the following measures :

Absenteeism Rate: Evaluate the engagement of your employees

Overtime Hours: Monitor your employees' workload in detail

Training Costs: Analyze the investments in your employees

Employee Productivity: Track the overall effectiveness of your workforce

Talent Satisfaction: Ensure your employees are satisfied in the long run

Cost per Hire: Analyze what it takes to find the perfect fit

Recruiting Conversion Rate: Find the best recruitment method

Subject 01

Group HR Dashboard

#CEDBI1

Required Profile

Software engineering student

Skills / Knowledge

Microsoft BI

SQL Server

SSIS

SSAS

Power BI

Number of interns

01

Duration of the internship

Between 4 and 6 Months

Time to Fill: Monitor how long you need to find a new employee

Talent Rating: Assess the quality of your employees

Employee Turnover Rate: See how your retention efforts work

Talent Turnover Rate: Evaluate how many talents you continually change

Turnover Rate by Group: Monitor if your diversity groups are satisfied

Dismissal Rate: Find out if you're recruiting the right employees

Female to Male Ratio: Understand the gender diversity in your company

Gender Diversity by Role: Track gender share on managerial positions

Ethnicity Diversity: Discover how diverse your departments are

Recruitment Breakdown by Ethnicity: Ensure a diverse recruitment process

Part-Time Employees: Watch the evolution of part-time workers over time

Average Time Stay: See how long your employees stay in your company

- Write down a good documentation and summarize the results in a report form.

Subject 02

Customers reviews based on sentimental analysis of CRM claims and Social Network.

#CEDBI2

Required Profile

Software engineering student

Skills / Knowledge

Python

NLP

Information Extraction (IE)

Information Retrieval (IR)

Sentiment analysis

DataViz

Machine learning and Texte Mining

Number of interns

01

Duration of the internship

Between 4 and 6 Months

Main objective

This end-of-studies project focuses on the implementation of an automatic data analysis system content that will be fed by a data feed collected from Microsoft Dynamics CRM and public data on the web such as the electronic press and social networks. Indeed, the system is initially provided with a flow collected from various sources. semi- or unstructured public data such as public data on the web (press electronic, social networks, etc.) and must then group the flow data by event or by specific subject then determine its tone, namely positive, negative, neutral, or mixed and this by using certain algorithms and methods of language processing natural.

Missions

The work plan will unfold as follows :

First, we carry out a bibliographical study of the different data analysis and mining methods, as well as tone detection methods.

We will continue in a second step with a study of the existing classification applications intonation from a web data stream.

Following the choice of the algorithm, we will proceed to the development of the different modules of the DataViz solution. And finally, lead to its implementation, testing and validation.

03

DevOps

01 Project

Subject 01

Automation of Azure resources provision

#CEDDO1

Required Profile

Software engineering student

Skills / Knowledge

C#

.Net core

Git

Azure DevOps

PowerShell

Number of interns

02

Duration of the internship

Between 3 and 6 Months

Main objective

CED deploys multiple solutions on the Microsoft Azure platform in fully-automated-process. IaC (Infrastructure as Code) , which applies programming concepts to infrastructure configuration, incorporates the provisioning process in development . However, getting the code is only the first step. Once the infrastructure is converted to code, what is needed to be done is to deploy it automatically and continuously.

Missions

Implementation of a project to ensure application delivery, provisioning automation of resources and application deployment.

- Application development (prototype)+ infrastructure as code.
- Creation and configuration of the Dev Ops environment (versioning, integration, delivery)
- Project deployment (Application + Infrastructure)

04

Quality Assurance

01 Project

Subject 01

Script automation and integration in CI/CD pipeline

#CEDQA1

Required Profile

Software engineering student

Skills / Knowledge

Robot Framework

Python

Azure

Agile

Scrum

VM

Pabot

Squash

Selenium

Number of interns

01

Duration of the internship

Between 4 and 6 Months

Missions

- Study of the existing
- Do manual testing to understand the functionalities to be automated
- Select and prioritize test scenarios to be automated
- Benchmark and selection of tools to be used for the automation
- Automate regression tests
- Integrate automated tests in CI/CD pipeline
- Generate automatic report
- Send automatic report to stakeholders
- Execute tests on different platforms/browsers
- Stabilize existing solution

Thank you !

Our contacts



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