

# Internship Certificate



CELFINET Certifies that

**António Cruz**

has successfully completed the **“SUMMER INTERNSHIP 2023”**

Duration: 10/07/2023 to 08/09/2023

*Beatriz Carvalho*  
HR Business Partner

**Internship Mentor:** Gisela Madruga

**Team:** Core + | Data Analysis

**Summer Internship Goals:**

- ✓ Develop basic skills in Excel. Understand its basic formats (.xlsx, .csv). Handle and process data in these file formats. Conduct basic cell operations. Learn basic data transformations. Use Excel data in data analysis pipeline.
- ✓ Develop the already acquired basic Python programming language skills. Explore and catalogue the several packages/libraries that Python has available for data analysis. Demonstrate and build data analysis solutions based on the acquired experience with these or other packages. Creatively use these packages or suggest others in a task or project.
- ✓ Explore what are the state-of-the-art processes and tools for data analysis. Successfully understand and follow along any project that is using these techniques within the DMA team. Participate and take over tasks within a data analysis project.
- ✓ Get a basic understanding of how Telecom works and its main concepts. Explore underdeveloped concepts of networks, connections, graphs, routing and equipment.
- ✓ Semi-autonomously develop basic skills in PowerBI. Learn how to handle, process and transform input data and build demo dashboards. Create a demonstrative data analysis pipeline for raw data to PowerBI dashboard.

*“The only source of knowledge is experience”*

*- Albert Einstein*