المدرسة الوطنية للعلوم التطبيقية
École Nationale des Sciences Appliquées d'Oujda
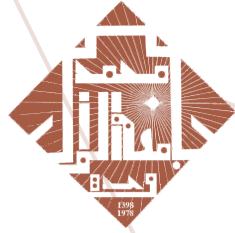
كلية العلوم
Faculté des Sciences
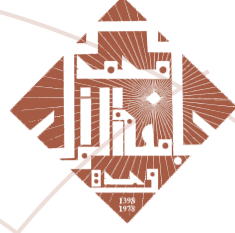
جامعة محمد الأول بوجدة
UNIVERSITE MOHAMMED PREMIER OUJDA

كلية الطب والصيدلة
Faculté de Médecine et de Pharmacie

المدرسة العليا للتكنولوجيا
École Supérieure de Technologie

Workshop on data analysis, Artificial Intelligence and Machine Learning for Medical Physics

(Physics and engineering doctoral day)

24 - 28 July 2023
FMPO
Oujda, Morocco

Course objective:

A common task for scientists, especially physicists, is to analyze data from an external source which may be of different formats. Phyton is one of the best and most powerful tools for performing basic analysis, trending results, and exporting results to another format.

The objective of this workshop is to enable researchers, PhD students and medical physicists to acquire skills in Python. By the end of the course, participants will be proficient in implementing data analysis using this programming language and using it in different applications.

Target group:

Participants should be research professors, PhD students, clinical or academic medical physicists who wish to learn and develop new skills in the Python programming language. People who have little or no Python experience or want to brush up on their skills are encouraged to attend.

Course content:

• Overview of the basics of programming and control flow.

• Classes and methods as building blocks of object-oriented programming. Explain how these can be applied in the context of typical medical physics data management. This will help develop skills beyond just linear code execution.

• Reading unstructured data that is often produced by CT, MRI and other modalities.

• Structure the data into a more machine-readable format for storage and retrieval – this helps prepare the data for rapid insertion into databases (although the databases themselves are not discussed).

Further information:
General chair: a.rrhioua@ump.ac.ma
GSM: +212 676 797 295

Topics:

• Python data analysis
• AI & Machine learning
• Medical physics
• Diagnostic Radiology
• DICOM image processing

Lecturer:

Eric Pace, Lead Medical Physicist, Medical Physics Expert, Medical Imaging Department, Mater Dei Hospital, Malta.
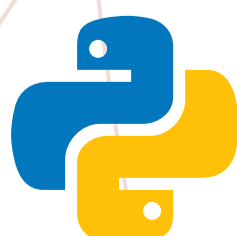
Deae-eddine Krim, post-doctoral fellow at University of Victoria, Victoria, BC, Canada.

Organisers:

Pr. M. Zerfaoui, FSO, Oujda Morocco.
Pr. F. Bentayeb, LPHMS, Morocco.
Pr. A. Didi, CNESTEN, Rabat, Morocco.
Dr. D.-E. Krim, FSO, Oujda, Morocco.
Pr. D. Bakari, ENSAO, Oujda, Morocco.
Pr. S. Didi, FPN, Nador, Morocco.
Pr. EL. Chaieb, FSO, Morocco.
Pr. A. Rrhioua, FSO, Oujda Morocco.
Pr. A. Benali, ENSAO, Oujda, Morocco.
Pr. A. Benlghazi, ENSAO, Oujda, Morocco.

To apply contact: m.zerfaoui@ump.ac.ma

Deadline: 20-July-2023

ARTIFICIAL INTELLIGENCE