

## People's Democratic Republic of Algeria

Ministry of Higher Education and Scientific Research University Center El Chérif Bouchoucha - Aflou Institute of Sciences **Computer Science Department** 



# Organizes:

A Study day on Artificial Intelligence and its Applications March 21st 2023





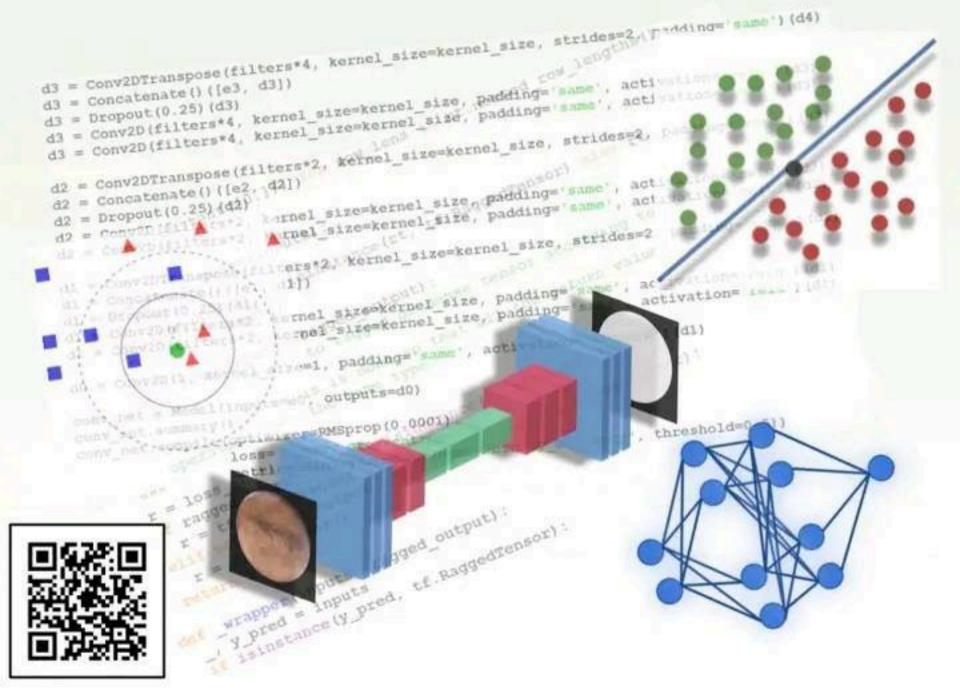
### Speakers:

Dr. LAIB Lakhdar

Dr. SELLAM Abdellah

Dr. BENHASSINE Nosreddine







# People's Democratic Republic of Algeria Ministry of Higher Education and Scientific Research University Center El Chérif Bouchoucha - Aflou Institute of Sciences Computer Science Department



### **◎** 9:00 AM **②** Auditorium

Study day program: Artificial Intelligence and Its Applications

Reciting some verses of the Holy Quran

Algerian national anthem

Opening word by Mr the president of the University Center Pr. TAHARI Abdou-El-Karim

A word by Mr the president of the Institute of Sciences Dr. BENSACI Ahmed

No.	Title	Time
01	Supervised Machine Learning Dr. LAIB Lakhdar	09:45 10:30
02	Unsupervised Machine Learning Dr. SELLAM Abdellah	10:30 11:15
03	Reinforcement Learning Dr. Benhassine Nasreddine	11:15 12:00
04	Lunch Break	12:00 13:00
05	Lab Session on Supervised Machine Learning Dr. LAIB Lakhdar	13:00 14:15
06	Lab Session on Unsupervised Machine Learning Dr. SELLAM Abdellah	14:15 15:30
	Closing	



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**Computer Science Department** 



Study day

Titled:

Artificial intelligence and its applications

### Problematic of study day

Artificial intelligence (AI) and machine learning (ML) are related but distinct fields. AI refers to the broader concept of creating machines or systems that can perform tasks that typically require human intelligence, such as visual perception, speech recognition, decision-making, and natural language processing.

There are several challenges and problems associated with the development of machine learning (ML) is the model can sometimes become overly complex and perform well on the training data but poorly on new, unseen data, this challenge highlight the importance of careful planning and development when building machine learning systems.

### Objectives of study day

- Building predictive models: One of the primary objectives of learning ML is to build predictive models that can be used to make accurate predictions or classifications based on data.
- Understanding data: Machine learning algorithms rely on large amounts of data to make accurate predictions. By learning ML, you can gain a deeper understanding of how to collect, clean, and preprocess data to make it suitable for machine learning.
- Career advancement: ML can be a valuable asset in a variety of careers, including data science, software engineering, and research. By developing expertise in ML, you can open up new career opportunities and increase your earning potential.

### Staff of study day

### Honorary President of the Academic study day:

Prof. Dr. Tahari Abdou el Karim -Director of the University Center

# Organisation Committee Chairman

Dr. BENSACI Ahmed

### President of the study day

Dr. Laib Lakhdar

#### Scientific Committee Chairman

Dr. SELLAM Abdellah

### Organized with:

10 Brains Scientific Club

# Topics of study day Conference

Time: from 9 a.m to 12 a.m

Place: auditorium

# Speakers Laib Lakhdar, Doctor in Computer Science,

University Center -Cherif Bouchoucha- Aflou

Sellam Abdellah, Doctor in Computer Science, University Center - Cherif Bouchoucha- Aflou Benhassine Nasreddine, Doctor in Computer Science, University Center - Cherif Bouchoucha- Aflou

The presentation will consist of explaining how machine learning works in a simple and didactic way. In particular, the presentation will be based on a comparison between the classic approach to data analysis and the more recent approach based on artificial intelligence.

 In summary, we will study the basic operation of a machine learning algorithm, namely what is concretely hidden behind the notion of "learning.".

### Topics of study day Workshop

Time: from 1 p.m to 3:30 p.m

Place: library room

#### Speakers

Laib Lakhdar, Doctor in Computer Science, University Center -Cherif Bouchoucha- Aflou Sellam Abdellah, Doctor in Computer Science, University Center -Cherif Bouchoucha- Aflou

With Python language under Google colab, we will work on supervised classification which will aim to predict a variable as efficiently as possible thanks to machine learning algorithms (SVM, Random Forest, etc.). Then we will learn an unsupervised classification in order to classify individuals in groups not known in advance, thanks to the implementation of a factorial analysis, a k-means algorithm.