

Ismail EZZAKI

MASTER STUDENT · FREELANCER PROGRAMMER

812 Ait kdif Ouarzazate Morocco

☎ (+212) 708070221 | ✉ ismail.ezzaki@edu.uca.ma | 🏠 ismailezzaki.me | 📷 ismailezzaki96

Education

Summer School on Methods of Effective Field Theory and Lattice Field Theory

BAD HONNEF PHYSICS SCHOOL , GERMANY

July. 2021

training at the frontier of QCD, EFTs and lattice field theory focusing on relevant physical problems.

ESCAPE Summer School 2021

LABORATOIRE D'ANECY DE PHYSIQUE DES PARTICULES - IN2P3 , FRANCE

Jun 2021

Data Science for Astronomers, Astroparticle and Particle Physicists

Summer School on Particle Physics

THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS , ITALY

May. 2021- Jun 2021

Got a detailed overview of particle physics & astrophysics

M.Sc. in High energy physics and computational physics

CADI AYYAD UNIVERSITY

Oct. 2018 - Dec. 2020

- **Rank:** 2nd in the promotion
- Depth knowledge in high energy physics and subatomic physics
- learned to resolve physics problems by computing

Computational physics projects

SIMULATION OF A MACH ZEHNDER INTERFEROMETER AS A CORONAGRAPH

- build a simulation of a Mach Zehnder interferometer as a coronagraph to use it in Oukaimeden observatory in Marrakech

ANALYSIS OF HIGGS BOSON IN THE FOUR-LEPTON FINAL STATES

- Reproduce the analysis of the discovery of the Higgs boson using the 2011 and 2012 datasets, in the four-lepton final states

EXTRACTING SIGNALS OF HIGGS BOSON USING NEW MACHINE LEARNING TECHNIQUES

- Explore the potential of advanced machine learning methods (SVM, Gradient boosting , random forest) to improve the discovery significance of the ATLAS experiment

Skills

Programming Languages : *Experienced:* Python | C++ *Familiar:* Javascript | Fortran | Java | Verilog

Frameworks & Libraries : ROOT | TMVA | Pythia | Jupyter | Matplotlib | Numpy | Pandas | Scikit-learn | PyTorch | Tensorflow

Technologies : Git | Linux (Debian) | Monte Carlo Simulation | \LaTeX

Soft Skills : Team working | Problem solving

Languages : *English :* Fluent | *French :* Fluent | *Arabic :* Native

Certifications

2021 **Deep Learning Specialization**, DeepLearning.AI Coursera

2020 **Machine Learning foundations**, Washington University Coursera

References

Abderrahim Adahchour,

- Senior university teacher
- My master teacher
- adahchour@uca.ac.ma ✉

Mohamed El kacimi,

- Senior university teacher
- member in ATLAS collaboration
- elkacimi@uca.ac.ma ✉

Mohamed Chabab,

- Senior university teacher
- My master thesis supervisor
- mchabab@uca.ac.ma ✉

SEFYANI LAKRIZI Fouad,

- Senior university teacher
- My master teacher
- sefyani@uca.ma ✉