




# ISMAEL MEKENE COULIBALY

## Institut Polytechnique

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 github.com/IsmaelMekene



### EDUCATION

2019-2020

**Master of Science – DATA SCIENCE AND ARTIFICIAL INTELLIGENCE**, DATA SCIENTECH INSTITUTE, Paris, France. Graduate program in France's top-ranking university for high-level scientific training. Ongoing:

- └ Applied Mathematics: Statistical analysis of massive and high dimensional data, Probability theory, Time series analysis, Artificial Neural Networks, Survival analysis, Stochastic processes
- └ Optimisation: Continuous, Linear, Integer, Convex and Metaheuristic Optimisation
- └ Machine learning: Supervised Learning, Unsupervised Learning, Deep Learning, Agent Base Modelling
- └ Data Engineering: Software engineering, Amazon AWS, Data wrangling with SQL, Hadoop & Spark.
- └ Management: Data Ethics & Law, IT Projects Management

2015-2019

**Bachelor of Science – APPLIED MATHEMATICS AND GEOPHYSICS** with major in **GEOLOGY** at UNIVERSITY OF BIRMINGHAM, Birmingham, United Kingdom. Undergraduate program in UK's top-ranking university

2014–2015

**Classes Préparatoires MPSI/MP\*** -- Intense undergraduate program leading up to competitive nationwide and worldwide entrance to the French Grandes Écoles for scientific studies, at INSTITUT NATIONAL POLYTECHNIQUE HOUPHOUËT-BOIGNY (INPHB), Yamoussoukro, Ivory Coast

### WORK EXPERIENCE

Winter 2019

Research intern, ENSEA, Abidjan, Cote d'Ivoire

Working on Optimisation lenses and studying Uzawa's algorithm under a stochastic approach:

- └ Working with machine learning toolkits (e.g., Tensorflow, PyTorch, Sci-kit Learn)
- └ Implementing and debugging ML algorithms
- └ Designing and modelling Convex optimisation algorithms

Research and Analysis Problem Solving Skills

Communication

Summer 2017

Tutoring freshers engineering students and Oral examiner, University of Birmingham, United Kingdom

- └ Teaching Science
- └ Project coordination

open-mindedness knowledge of social realities Teamwork Sense of organisation

### PROJECTS

PYTHON, DEEP LEARNING & COMPUTER VISION \_DECEMBER 2020 -- ONGOING [DSTI, France]

Taking part in the DSTI DataLab Hackathon and Designing a brand new Custom Object Detector.

Python Keras EAST YOLO & Darknet

Docker & AWS

Real Time Object Track

Geometry

TensorFlow

### COMMUNITY INVOLVEMENT

IVORIAN TAEKWONDO NATIONAL TEAM

- └ Vice African Champion, World Cup Bronze Medallist and Multiple Open Gold Medallist.

AMEX FOUNDATION

- └ Pan African Mathematics Olympiad Bronze medallist, International mathematics Olympian.

### SPECIAL SKILLS

Programming languages    Most to less fluent: Python, R, C|| JavaScript, HTML, CSS || Java, Julia, MATLAB  
Software environment    Linux, Git, Windows  
Languages    French (Native), English (Fluent), Arabic (Beginner), Bambara (Native)

