Muhamed **Kouate**

BSc Student in Computer Science · Student Researcher at Google

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Education

ETH (Eidgenössische Technische Hochschule Zürich)
Zurich, CH

RESEARCH ASSISTANT IN MEDICAL IMAGING ANALYSIS
April 2022 - Present

- Working on a project on Medical Imaging Analysis with Deep Learning techniques.
  Co-supervised by Prof. Ender Konukoglu, Prof Niki Martinel and G. Bredell.

Stanford University
California, USA (Remote)

VISITING STUDENT RESEARCHER (COMPUTATIONAL NEUROSCIENCE LAB)
March 2021 - Oct. 2021

- Worked on a semester project co-supervised by Professor Ehsan Adeli and Professor Niki Martinel.
  Topic: generation of images starting from the text with DALL-E.

Università degli studi di Udine
Udine, Italy

BSc IN COMPUTER SCIENCE AND ENGINEERING
Oct. 2017 - Present

- Relevant coursework: Data Science, Machine Learning for Big Data, Data Analytics (elective course), Computer Vision (elective course), Internet of Things, Algorithms and Data Structures, Calculus, and Databases.

Experience

Google
Paris, France

STUDENT RESEARCHER, SOFTWARE ENGINEER
Incoming (October 2022)

- Incoming Student Researcher at Google Research (PAIR group).
  Supervisor: Lucas Dixon.

BidPremium Srl
Udine, Italy

AI ENGINEER IN COMPUTER VISION (PART-TIME)
March 2020 - April 2022

- Analyzed the state-of-the-art to identify the most appropriate techniques for the task (papers, and surveys).
- Collected a curated dataset with scripts in Python (CVAT, PASCAL VOC, COCO, and YOLO format).
- Implemented the most promising models with Pytorch or Tensorflow, and tested their performance on the internal dataset.
- Development and maintenance of Web Services and / or API (Flask API) with related documentation for the customer.

Towards Data Science
Canada (Remote)

ARTIFICIAL INTELLIGENCE WRITER
February 2021 - Present

  Selected by Towards Data Science as AI Writer to write several articles. Currently, my blog posts have received more than 1.7K views.

Datamantix Srl
Udine, Italy

AI SOFTWARE DEVELOPER (PART-TIME)
Nov. 2019 - March 2020

  Cleaned the datasets through Python scripts, and performed the training with Fast.ai or Pytorch.
  Project for which I actively contributed: detection of diabetic retinopathy through deep learning techniques.

Skills

Programming Languages	Python3, Java SE, Scheme, Javascript
Technical Skills	Bash, Zsh, SSH, LaTex, Markdown, Jupyter Notebook, RegEx, debugging (GUI, gdb), TDD, OOP
Frameworks and Libraries	Pytorch, Tensorflow, OpenCV, Fast.ai, NumPy, SciPy, Matplotlib, Sklearn, Flask API
Software	Git, GitHub, Linux/Windows/macOS, Jupyter Notebook/Lab, VS Code, Pycharm
Languages	English, French, Italian (native), Wolof (Native)

Honors & Awards

Jul. 2022	**University of Cambridge, Student**, Selected by ELLIS to participate to their first Machine Learning Summer School at the Department of Computer Science and Technology. Topics: Statistical Causality, Machine Learning and Graphs, and many more. Speakers: Petar Veličković, Silvia Chiappa	*Cambridge (UK)*
July 2021	**PRAIRIE MIAI Artificial Intelligence Summer School,Student**, Summer School organized by Prairie and MIAI@GRENOBLE ALPES with the support of Inria and NAVER LABS Europe. Topics: Computer Vision, NLP, robotics, and healthcare. Speakers: Cordelia Schmid, Yann LeCun, and many more.	*France (Virtual)*
Jan. 2021	**DeepMind, Student**, Selected by DeepMind to participate in M2L structured around 6 days of keynotes, lectures, and practical sessions. Topics: Generative models, Deep Reinforcement Learning, and many more. Speakers: Christopher Bishop, David Silver	*Milan, Italy (Virtual)*
Nov. 2020	**Huawei, "Seed For the Future", Intern**, Chosen by Huawei among Top 50 Italian ICT talented students to attend a training program (AI, IoT, and many others).	*Beijing, China (Virtual)*
Oct. 2020	**Lead The Future, Mentee**, Among the few Italian students selected to be mentees for LeadTheFuture, with an acceptance rate below 20%. Mentor: Francesco Visin, DeepMind	*Italy*
2019	**UNIUD**, Scholarship winner thanks to academic performance.	*Udine, Italy*
2018	**UNIUD**, Scholarship winner thanks to academic performance.	*Udine, Italy*
2016	**UNESCO**, Guest of honor at "Language Marty's Day and International Mother Language Day".	*Milan, Italy*

Certifications

In progress	AI for Medicine Specialization - Deeplearning.ai	*Coursera*
Jan. 2021	Intro to Deep Learning with Pytorch	*Udacity*
Nov. 2020	Deep Learning Specialization - Deeplearning.ai	*Coursera*

Articles

Feb. 2021	Classic Seq2Seq model vs. Seq2Seq model with Attention "Let's pay Attention now!" LINK	*Towards Data Science*
Feb. 2021	Popular Datasets for 3D Human Pose Estimation "Acquire the knowledge to interpret and create your own datasets" LINK	*Towards Data Science*