Abdou Aziz DIOP

Data Scientist

Data Scientist, I'm a holder of two MSc in Data Transmission and Mathematics Application and a Bachelor in Maths and Computer Science. I have working experience in Data Science and Software Engineering. I'm interested in working with Data Science ans passionate about NLP. I have very strong skills with programming languages, databases , servers and Software Engineering.

- ✉ abdouaziz@gmail.com
- 📍 Dakar, Sénégal
- in linkedin.com/in/abdouaziiz
- 📱 +221 77 309 77 87
- 🌐 abdouaziz.github.io/
- ⌨ github.com/abdouaziz

FORMATION

M.Sc. in Data Transmission and Information System
University of Cheikh Anta Diop

09/2018 - 12/2019   *Dakar , Sénégal*

Thesis
- Automatic Speech Recognition in wolof (wolof language spoken in Senegal West Africa)

M.Sc. in Mathematics and Application
University of Thiés

05/2015 - 04/2016   *Thiés , Sénégal*

Thesis
- Master research , thesis was about Error coding . topic : Rank Based Cryptography Encryption & Signature

B.Sc. in Mathematics and Computer Science
University of Thiés

10/2013 - 08/2015

Courses
- Course mathematics and computer science : Functional Analysis - Distribution - Probability - Introduction to PDEs - Alebre - Scientific Computing Software - Fourier Analysis and Signal Processing - Spectral Theory - Operational Research -Scientific English

WORK EXPERIENCE

Data Scientist / Software Engineer
Baamtu / Datamation

01/2020 - 08/2020   *Dakar , Senegal*

Ganeyi Compliance
Achievements/Tasks
- Developing Web application to manage customer file compliance with Spring Boot Angular , JWT
- Expose an deep Learning API to classify folders
- Use an RPA (Automagica) to processes tasks automatically
- Use an OCR for extracting information from documents
- Consolidate a database from the extracted information
- Developpe an dashboard to consult the traffic from the OCR API

GENERAL SKILLS

Data Visualization · Machine learning · Deep learning · Pattern Recognition · Natural Language Preprocessing · Agile Methodologies · Programming · Docker · Bert · Transformers

TECHNICAL SKILLS

Operating System :
Linux, MacOS , Windows

Database/ Server :
MySQL, Oracle, SQL Server, MongoDB

Programming Language / Framework :
Python, Scikit-learn, OpenCV, Javascript, Type script, Java, Tensorflow, Keras, Pytorch, PHP

Other Software / Tools
Jenkins, Git, SonarQube, Nexus, Redmine RPA , Automagica, Uipath, Cortex, Flask, FastAPI, Numpy, Pandas, Scikit Learn, AWS, HuggingFace

CERTIFICATES

Standford Machine Learning Certification
This certification provides a broad introduction to machine learning.

Deep learning Specialization Coursera
The Deep Learning Specialization is a program that provides an understanding of the capabilities, challenges, and implications of deep learning and prepares you to participate in the development of cutting-edge AI technology.

Tensorflow Developper Coursera
A professional certificate program that teaches applied machine learning skills with TensorFlow so that we can build and train powerful models.

Natural Language Processing Coursera
This Specialization will equip you with the state-of-the-art deep learning techniques needed to build cutting-edge NLP systems. Use dynamic programming, hidden Markov models, word embeddings LSTMs, GRUs, and Siamese networks in TensorFlow and Trax of complete sentences, text summarization, question-answering and to build chatbots. Models covered include T5, BERT, transformer, reformer .

LANGUAGES

French
Native or Bilingual Proficiency

English
Full Professional Proficiency

WORK EXPERIENCE

Software Engineer
Finlence

10/2019 - 12/2019   *Dakar , Sénégal*
Finlence

Achievements/Tasks

- Contribute to the delivery and support of integration projects for the costumer.
- Contribute to the development and testing phases of integration projects.
- Application for sending SMS/email notifications and alerts (SMTP , Sms Gateway).

PROJECTS

Soraberta ☑
- Soraberta is pretrained roberta base on the wolof language
- wolof is spoken in west Africa
- HuggingFace library

Cough'In ☑
- Developpe a model that allows to diagnose from the cough if the person has the symptoms of COVID19
- Using Automatic Speech Recognition techniques to train the modele
- Pretrained and fine tuning different modele and implementation
- Develop a mobile application for ease of use

Automatic Speech Recognition in Wolof language ☑
- In Senegal, more than 50% of the population cannot read or write in French or English. A large part of the population does not benefit from the advantages of digital technology because of the language barrier, while 90% of the population speaks Wolof. This project consists in setting up an API that will translate spoken Wolof so that it can be used in applications to allow the Senegalese people to fully enjoy the benefits of digital technology.
- Building a speech recognition model
- Fine tuning of Wave2vec and LAS Model
- Server the model

Auto Completion ☑
- Build an auto completion system Based on N-grams and language model
- Exposing an api with flask and developing the frontend with angular

Naural Machine Translation ☑
- Build Natural Machine Translation Based on Seq2seq architecture
- Seq2seq and Mechanisme of Attention

ChatBot ☑
- Chatbot Based on Seq2seq + Attention Mechanisme .
- Use Rasa NLU

Sentiment Analysis :To Vaccinate or Not to Vaccinate (COVID-19) ☑
- The objective of this project is to develop a model of Deep learning to evaluate if a twitter publication related to vaccination is positive or negative

Maodo Poetry ☑
- An NLP model to generate poems about El Hadji Malick Sy

Gender Based Violence ☑
- Gender-based violence, or GBV, is an ongoing and ever-resent scourge around the world
- The objective of this project is to create a machine learning algorithm that classifies tweets about GBV into one of five categories: sexual violence, emotional violence, harmful traditional practices, physical violence and economic violence.

LANGUAGES

Wolof
Native or Bilingual Proficiency

INTERESTS

🖳 Artificielle Intelligente   ▨ Mathematics

⚽ Football   💻 Programming