## Sambou KONE

## Sector 5, Mamaribougou Bougoudaba, Bamako, Mali West Africa

samboukone99@gmail.com | +22377818701 | Research Gate | LinkedIn

Dual full time Bachelor's degree holder in Computer Science and Electronics & Communication passionate about Data Science and Machine Learning / Deep Learning with a focus on AI driven Data Solutions with strong motivation in Research on Human Computer Interaction / Computer Vision / Multimodal Computing.

Skills: C/C++, Python, MATLAB, PyTorch, TensorFlow, BigQuery SQL.

## **EDUCATION**

BTech/ Electronics&Communication (Batch Topper 3.64/4.00), Jain University - Bangalore 2020-2024

'Smart Battery Management Systems to Enhance Battery Life Based on Deep Learning' Final Project:

Supervisor: Dr. Sunil MP

Submission: Proposed date – November 2023

Research Methods: Deep learning models built in Python (Scikit-learn, TensorFlow) estimated SoC, SoH, and

RUL with high accuracy. Evaluation using MAE, RMSE, and R^2 showed clear

improvements over traditional BMS method

2019-2020 Master 1 (Non Degree), National School of Engineering ENI ABT Bamako - Mali

'Human Voice Recognition System Based on Feed Forward Neural Networks for Platforms' Final Project:

Supervisor: Dr. Abdoulaye Sidibe

Research Methods: Python 3; NumPy/Librosa for DSP; PyTorch/TensorFlow + scikit-learn

> Human voice recognition was implemented in Python using PyTorch and Scikit-learn with feed-forward neural networks trained on MFCC/FBANK features. The system's performance

was assessed through accuracy, F1-score, and Equal Error Rate (EER) compared to

traditional methods...

2016-2019 Bachelor Of Computer & Telecom Engineering, National School of Engineering - Mali

SQL, Merise, HTML/CSS, UML, Java, User Interface Interaction Modules:

Final Project: Student Management System Website using PHP/JS/HTML/CSS/Bootstrap.

## PROFESSIONAL EXPERIENCE

11/2024 – Present

Co Founder & CTO (Independent), Super DataInsights & AI Scientists Innovations- Bamako Vision-language models to extend capabilities by combining text and image analysis for deeper multimodal understanding. IoT and AI/ML research. Computer Vision Algorithms(

ViT, DTFR), Aiming To Publish Academic Papers.

11/2024 – Present Data Analyst - Full Time (Remote), ObjectWays Technologies - Chennai (Tamil Nadu).

As a Data Analyst on the Amex SST annotation project, I was responsible for cleaning and pre-processing Speech-to-Text transcript files for French CCP (Customer Care) and CM (Card Member) interactions. BigQuery SQL and ETL processing (Dataform, Cloud Data Fusion, Apache Beam), Speech-To-Text (STT•French) data insights collection for ML accuracy

~ NLP tools: vTensorAct Studio+ Amazon SageMaker + Encord.

Providing 90% accuracy for User (Card Member) and Customer Care Personnel (CCP) interaction

monitoring for Banking Service Quality Improvement.

4/2023 – 10/2024 **Student Researcher**, Jain University - Bangalore.

The research area also covers embedded system hardware (microcontrollers and FPGAs), digital signal/image processing, real-time intelligent systems systems, Smart Battery

Management Systems for Autonomous Vehicles using Machine Learning.

10/2020 – 2/2022 Network Systems Engineer Intern, Celeste Telecom Mali Sarl- Bamako

Assessed business communication needs and recommended PABX/VoIP solutions. Installed, configured, and upgraded network systems. Skilled in L2/L3 protocols (BGP, OSPF, EIGRP, RIP, VLAN, STP, VTP) and SD-WAN/SONiC. Managed and scaled networks with Cisco,

Huawei, Netgate, and Fortinet

PUBLICATIONS ET PROJECT

2024 'SMART BATTERY MANAGEMENT SYSTEM FOR PORTABLE DEVICES TO ENHANCE

BATTERY LIFE BASED ON MACHINE LEARNING' april 24 |IJIRT|Volume 10 Issue 11|ISSN:2349-6002

2023 'COTTON WOOL DETECTION FOR DIABETIC RETHINOPATHY'

april 24, Minor Project Research at ECE department, Under Prof. Chethan GS

CONFERENCE AND SEMINAR PAPERS

2023 **'Electronics And Communication Engineering - 2030'**. Held in march 2023 Presented at

Jain University's ECE Department Avalanche Club, Bangalore, the best presentation award.

ACADEMIC EXPERIENCE

2022 – Now Generative AI Tools Tutor,

LLMs, ChatGPT, Perplexity, DeepSeek. Gen AI automation and AI Agent Building over n8n,

TensorAct. AI assisted Coding and Revision.

2020 – Now French Teacher Online,

As native French Speaker, I used to be part time French Tutor for A1,A2,B1,B2,C1, C2

ACTIVITIES

2019 – Present Social Charity Youth of Mamaribougou

Youth Charity Trust organization for widows and Orphan in Mali through donation of kits,

food and welfare

SKILLS

Languages English and French (bilingual); Spanish (conversational); Arabic (Fluent); Hindi (Fluent).

REFERENCES

Dr. Abdoulaye Sidibe Prof. Pramod R Dr. Hamsa S

Department of Computer Sciences

& Telecom

Department of Electronics &

Communications Engineering

ENI - ABT JAIN University
Bamako, Mali Bangalore, India
+223 90375556 +91 9739163955

abdoul@bk.ru pramodr@jainuniversity.ac.in

Department of Electronics & Communications Engineering Jyothy Institute of Technology

Bangalore, India +919986284426

hamsa.s@jyothyit.ac.in