



NDINGUE NYA FREDY YANN

MASTER DEGREE IN FUNDAMENTAL COMPUTER SCIENCE,
MACHINE LEARNING RESEARCH ENGINEER,
WEB AND MOBILE DEVELOPER

CONTACT

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<https://github.com/fredyndingue>
Yaoundé - Cameroon

PROFILE

Over the past few years, I have developed a lot of skills in machine learning research, which I would like to deepen in a reputable laboratory. I want to contribute to the advancement of science in a significant way. I intend to dig deeper into the contours of machine learning and computer vision, discover and produce new knowledge that can help to solve the problems that will transform our world, in a competitive and collaborative environment.

TECHNICAL STACK

Python, Pandas, Numpy,
Scikit-learn, Scipy,
Matplotlib, Seaborn, Keras,
Tensorflow, PyTorch,
XGBoost, YOLO, Google
Colab

EXPERIENCE

**RESEARCH ENGINEER • CENTRE PASTEUR DU CAMEROUN - UY1 •
24/02/2021 - 24/02/2022**

I worked on the design of an automatic reading machine of RDT cassettes for the diagnosis of covid-19. In particular, I designed a machine learning algorithm with a low false negative rate and an acceptable false positive rate, based on object detection and ensemble learning techniques.

**FRONTEND AND MOBILE DEVELOPPER • MOBSTORE • 01/06/2019
- 31/07/2020**

Development of the frontend part (Angular 7) and mobile application (Android Studio) of a large business management application.

**WEB DEVELOPPER • GDT-MS INTEGRATION • 01/08/2017 -
31/01/2018**

Integration of REST APIs in Java application to optimize payment for the use of certain online services (Active campaign, Timesheets, LiveChat, Wrike)

EDUCATION

**MSC COMPUTER SCIENCE • DECEMBER 2020 • UNIVERSITY OF
YAOUNDE 1 - 3.60 GPA OVER 4**

**ECOLE MATHEMATIQUES AFRICAINE SUR LES BASES
MATHEMATIQUES DE L'INTELLIGENCE ARTIFICIELLE • 2019 • EMA,
UY1, AFD, INRIA**

GOOGLE ANDROID DEVELOPER • 2019 • GOOGLE, ALC, PLURASIGHT

BSC • JULY 2017 • UNIVERSITY OF DOUALA

LANGUAGES

French
English

AI SKILLS

Supervised Machine Learning, Deep Learning, Computer Vision, Neural Networks, Image Processing, Data Cleaning, Exploratory Data Analysis, Data Visualization, Model Deployment, Custom Loss Functions, Categorical encoding

ALGORITHMS

Convolutional Neural Nets
Ensembles
Bagging, Boosting
GAN, Autoencoders
YOLO object detection
Decision Trees
Random Forest
CatBoost
XGBoost

INTERESTS

Machine Learning
Deep Learning
Images classification
Object detection
Tabular data classification
Software development
DevOps
Continuous integration
Football

HACKATHONS ACHIEVEMENTS

July 2022 – **AI4D Lab Tanzania Tourists Classification**

- Predict cost spent by tourists based on historical data
- Tabular data classification
- Strong EDA with insights for great feature engineering
- Using XGBoost with GridSearchCV (log_loss 1.049)

June 2022 – **Makerere Fall Armyworm Crop Challenge**

- Corn leaves images preprocessing, data augmentation
- MobileNetV2 convnet for classification (AUC 0.9980)

November 2021 – **Makerere Passion Fruit Disease Detection**

- Fruits images preprocessing
- YOLO object detection

April to June 2021 – **Cameroon Analytic Ultrasound Image Challenge**

- Ultrasound images preprocessing, data augmentation
- Boosting
- Convolutional neural networks for image classification

See all through <https://github.com/fredyndingue>

PROJECTS

REPAIR Project – Centre Pasteur Cameroun

- collection, processing and annotation of TDR images
- YOLOv5 object detection
- Convolutional neural networks for image classification
- Ensemble learning
- Conferences presentation

Msc Thesis, convolutional neural network for breast cancer detection

- Breast images processing
- VGG16 transfer learning and end-to-end classification

SCIENTIFIC PRIZES

- ❖ Winner of the FR2I Engineering and Innovation 2020 prize, in the Artificial Intelligence and Image Processing section
- ❖ 2nd prize at the national scientific olympiads, Intelligentsia Corporation, 2014