

Amina Mardiyah Rufai

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🌐 Personal Webpage

🐦 diyyah92

🌐 Amina Mardiyah Rufai

🔗 Scholar



Employment History

- Mar 2023 – present 📌 **Research Intern**, Idiap Research Institute | Switzerland
Description: *Internship after Master's degree*
Achievements: Analysed a psychological speech and text dataset on behavioural interviews.
- Fine-tuned a language model on text-classification to predict and classify storytelling versus non-storytelling elements in behavioural interviews.
- Jun 2022 – Aug 2022 📌 **Research Summer Intern**, École polytechnique fédérale de Lausanne (EPFL) | Switzerland
Description: *Internship completed as part of my degree in Machine intelligence*
Achievements: Analysed a large time series dataset from Twitter and fine-tuned a language model for Multilingual Covid Sentiment Analyzer
- Nov 2021 – May 2022 📌 **Research/Solutions Analyst**, Data Scientist Network | Nigeria
Achievements: - Designed, analysed, and engineered workflows using a combination of Deep Learning, Natural Language Processing, Automatic Speech Recognition, and Ontological Knowledge Graphs.
- Designed and Developed a health-focused FAQ-Bot using DialogFlow and data insights from Audio data.
- Oct 2020 – Oct 2021 📌 **Technical Delivery Intern**, Data Scientist Network | Nigeria

Education

- 2021 – 2022 📌 **M.Sc. Machine Intelligence, African Institute For Mathematical Sciences** | Senegal .
Thesis title: *Statistical Machine Translation from English to Wolof*
- 2017 – 2019 📌 **M.Sc. Biomedical Engineering, University of Lagos** | Nigeria
Thesis title: *Classification of Retinal Fundus images with application to Glaucoma diagnosis..*
- 2010 – 2015 📌 **B.Eng. Chemical Engineering, University of Benin** | Nigeria

Research Publications

- 1 T. Adewumi, M. Adeyemi, A. Anuoluwapo, *et al.*, "Afriwoz: Corpus for exploiting cross-lingual transfer for dialogue generation in low-resource, african languages," in *2023 International Joint Conference on Neural Networks (IJCNN)*, 2023, pp. 1–8. 🌐 doi: 10.1109/IJCNN54540.2023.10191208.
- 2 T. Olatunji, T. Afonja, B. F. P. Dossou, *et al.*, "AfriNames: Most ASR Models "Butcher" African Names," in *Proc. INTERSPEECH 2023*, 2023, pp. 5077–5081. 🌐 doi: 10.21437/Interspeech.2023-2122.
- 3 O. Adekanmbi, W. Oyewusi, M. Salami, *et al.*, "Ai-powered understanding of family planning behavioural change using the fogg model," May 2022.
- 4 A. M. Rufai, A. A. Adebayo, D. Ajisafe, O. Adegboro, E. Oduntan, and T. Arulogun, *Nigerian pidgin++*, Poster Presentation, BlackinAI Affinity Workshop | NeurIPS, Dec. 2022.

Skills

Core Programming Language	Python, Shell
Frameworks/Libraries	Pandas, Numpy, Matplotlib, Seaborn, Plotly, Pytorch, Scikitlearn, Git, HuggingFace Transformers , Linux CLI etc
Machine learning,Deep Learning	Supervised,Unsupervised Modelling, EDA, Deep Learning, NLP, Automatic Speech Recognition(ASR), Xgboost, Transformer models, Wav2vec2, Whisper, Pattern Recognition etc
Soft Skills	Team player, Attention-to-details, Analytical Skills, commitment to personal development
Languages	English(Native), French(Basic), Hausa(Basic)
Misc.	Writing, competitive hackathons, paper review for top conferences/workshops (EMNLP, ACL, BlackinAI)

Miscellaneous Experience

Awards and Achievements

2022	Top 5 , Google ASR Research Hackathon
2021	Silver Medal , AIMS Microsoft Hackathon by Zindi Africa.
2019	Gold Medal-Team Arete , DataHack by Access Bank Nigeria
2018	Best Display of 21st Century Competencies , 3D Africa - HackForGood 2018 by Youth For Technology Foundation

Volunteering Experience

2021, 2022	Workshop Reviewer and Volunteer , Black in AI Black AIR
	Research Projects Collaborations: AfriWoz(2023), AfriNames(2023), African NLP Research Group (Masakhane)
2020-2022	Lead Co-ordinator of Ladies in AI community , Data Scientists Network(DSN)

Referees

Phil N.Garner	<i>Senior Research Scientist</i> , Idiap Research Institute pgarner@idiap.ch
Martin Jaggi	<i>Professor</i> , École polytechnique fédérale de Lausanne (EPFL) jaggi.martin@epfl.ch
Olubayo Adekanmbi	<i>Lead Covener</i> , Data Scientist Network olubayo@datasciencenigeria.ai