

Sadura Priscilla AKINRINWA

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EDUCATION

Federal University of Technology Akure

PhD in Computer Science

Ondo State, Nigeria

Mar 2017 - Nov, 2021

Federal University of Technology Akure

Master of Technology in Computer Science

Ondo State, Nigeria

Jan 2012 - Dec 2015

Federal University of Technology Akure

Bachelor of Technology in Computer Science

Ondo State, Nigeria

Sept 2003 - Aug 2008

RESEARCH INTERESTS

- Data Science, Machine Learning, Natural Language Processing, Medical Image Analysis, Computer Vision in Healthcare, CNN Model Optimization, Fairness in AI

PUBLICATIONS AND TALKS

Peer-Reviewed Publications

- Deep Learning Models for Classification of Covid-19 Severity Levels (O. Olabode, K. G. Akintola, E. Adeyemi, O. R. Akinyede, B. Afeni, R. Akinbo, A. I. Olabode, and **S. P. Akinrinwa**) 2024, J Inform Techn Int, 1(1): 102 [[Paper](#)]
- Breast Histopathology Images Multi-Classification using Ensemble of Deep Convolutional Neural Networks (**S.P. Akinrinwa**, O. Olabode, O.C. Agbonifo, K.G. Akintola) 2022, International Journal of Scientific Research in Computer Science and Engineering, 10(6), pages 9-21. [[Paper](#)]
- The Influences of Digital Divide on Career Selection in Information Technology among Secondary School Students in Akure Metropolis (Afolayan, A. H., Ojokoh, B. A. and **Akinrinwa, S. P.**) 2017 The Federal University of Technology, Akure, School of Sciences Fifth Annual Conference, pages 303-316. [[Paper](#)]
- Decision Support System for Examination Timetabling (**Akinrinwa, S. P.**, Olabode, O., Oluwadare, S. A., and Adesuyi, A. T.) 2015, OWSD FUTA 2015 conference proceedings, pages 439-444. [[Paper](#)]

Peer-Reviewed Poster Presentations

- Towards Real-Time Breast Cancer Diagnosis: Enhancing CNN Model Efficiency and Fairness **S. P. Akinrinwa**, O. M. Omotosho
Poster presented at **NeurIPS 2024**
- Enhancing Healthcare Access: A Data driven Hybrid Collaborative Filtering Sentence Similarity Approach to Personalized Physician Recommendations (**Sadura Akinrinwa**, Olatubosun Olabode, Olatayo Adewuyi) 2023
Poster presented at **NeurIPS 2023**
- A Study on Breast Histopathology Images Multi-Classification with Ensemble of Deep Convolutional Neural Networks (**Akinrinwa S. P.**, Olabode O., Agbonifo, O. C. Akintola, K. G) 2020

Poster presented at the 2nd African Symposium on Big Data, Analytics and Machine Intelligence and 6th TYAN International Thematic Workshop

- Analysis of Computational Resource Usage of Deep Learning Models on Breast Histopathological Images Classification Task (**Akinrinwa, S. P.** and Oni, S. A.) 2019 Poster presented at the Women in Machine Learning workshop at **NeurIPS 2019**

Publications in Progress.....

- Towards Real-Time Breast Cancer Diagnosis: Enhancing CNN Model Efficiency and Fairness
S. P. Akinrinwa, L. Agbotiname 2024
- NLP Model for Postgraduate Research Examiner Recommendation Based on Scholarly Activity
(**Sadura Akinrinwa**, Samuel T. Ogunjo, Kehinde D. Akinrinwa) 2024
IEEE Nigercon 2024 conference
- Prosodic Parameterisation and Ensemble Machine Learning Techniques for Speech Emotion Detection (Olaniyan Julius, Ibidun. C. Obagbuwa, Esiefarienrhe B. Michael, Ayodele A. Adebiji, Olaniyan Deborah **Akinrinwa S. P.**) 2024 IEEE Nigercon 2024 conference
- Direct English-to-Yoruba speech Translation model using Transformer with Augmented Attention Mechanism (Olaniyan Julius, Ibidun. C. Obagbuwa, Esiefarienrhe B. Michael, Ayodele A. Adebiji, Olaniyan Deborah **Akinrinwa S. P.**) 2024 IEEE Nigercon 2024 conference

RESEARCH IN PROGRESS

- Large Language Model Chatbot for Mental Wellbeing Evaluation for First Year Undergraduate Students
- Transforming Healthcare through Machine Learning: Enhancing Disease Diagnosis, Prognosis, and Social Well-being.

TEACHING AND RESEARCH EXPERIENCE

Department of Data Science - Federal University of Technology Akure

Ondo, Nigeria

Lecturer

June 2023 till date

- Courses Taught: Python Programming, Data Analysis, System Administration, Computer Networks, Introduction to Data Science and Machine Learning.
- Curriculum Development: Create and deliver course materials, including lectures, labs, exams, and assignments.
- Hands-on Experiments: Lead practical sessions in Python Programming, Data Analysis, Computer Networks, and System Administration.
- Research Supervision: Supervise undergraduate research, resulting in conference presentations and publications (eight theses supervised).
- Administrative Roles: Serve as the School Registration Officer and Adviser for first-year Information Systems students.
- Student Groups: Advise the African Digital Health Student Network and Data Scientist Network at FUTA

Department of Information Technology - Federal University of Technology Akure Ondo, Nigeria

Course Instructor / Practical Demonstrator / Research Assistant

Aug 2013 – Jun 2023

- Courses Taught: Python Programming, Comparative Programming with Python and PHP, Introduction to Data Science, and Computer Networks.
- Designed practical lesson plans and outlines.
- Student Evaluation: Assessed students through written, oral, and practical exams.
- Technical Setup: Installed and managed computer hardware, software, and network solutions.
- Seminars: Delivered over 10 seminars on computational technologies to students and faculty.
- Research Contributions: Conducted deep learning research for histopathology image classification, curating and analyzing specialized dataset to advance health research.

Computer Resource Centre - Federal University of Technology Akure

Ondo, Nigeria

Network Engineer to Principal Network Engineer

Nov 2011 – Aug 2013

- Network Installation and Support: Installed and managed Cisco and Mikrotik switches and routers, providing comprehensive network installation and support services.
- IP Network Solutions: Engineered and executed end-to-end IP network solutions on Cisco devices, ensuring reliable connectivity across the campus.
- Technical Expertise: Demonstrated proficiency in DHCP, Firewall, Proxy, DNS, Load Balancing, HTTP/HTTPS, TCP/IP networks, network design, configuration, and infrastructure management.
- LAN Management: Successfully managed the LAN across six university buildings, resolving both wired and wireless connectivity issues.
- Documentation: Created detailed documentation of processes and procedures to support the deployment and maintenance of network devices.