Happy Monday

Associate Professor

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Summary

A passionate computer vision and deep learning expert with years of research experience and a PhD in Computer Science. As an Associate Professor at the School of International Education, Chengdu University of Technology Oxford Brookes College, driven by the desire to bridge advanced computational techniques with practical applications in medical imaging and AI. My research focuses on deep learning, machine learning, wavelet transform, and their integration into medical image processing, recognition, and fault diagnosis. With a proven track record of publishing over 75+ papers and achieving significant recognition for my contributions, such as the "Best Paper Award" (PRAI'21) and "Best Oral Presentation Award" (ICAIT'2024). I am dedicated to advancing the state of AI through innovative methodologies. My works have received over 900 citations with an h-index of 17. I have been recognized with numerous awards for academic performance and excellence in research. I have mentored and supervised numerous graduate and undergraduate students, helping them develop skills in deep learning, machine vision, and academic writing. As an active contributor to the academic community, I serve as a peer reviewer for various prestigious journals in the field, including IEEE Transactions on Industrial Informatics and Journal of Medical Internet Research.

Web of Science Google Scholar orcid Stackoverflow Personal Website

Education

2024: **Postgradute Certificate in International Education (PGCIE)**, *Staffordshire University*, UK.

Action Research: Investigating the Impact of Flipped Classroom on In-Class Programming Engagement

2022: **PhD, Computer Science & Engineering**, *University of Electronic Science & Technology of China*, China.

Dissertation: Research on Multi-Resolution Wavelet Deep Neural Network and Its Applications

2018: **Master of Engineering, Electronic Science and Technology**, *University of Electronic Science & Technology of China*, China.

Thesis: Construction of Equivalent Model of Patch Antenna using Magnetic Dipoles

2014: **Bachelor of Engineering**, *Federal university of Technology, Akure*, Nigeria.

Thesis: Biogas Production from Anaerobic Digestion of Cow Dung with Crop Residues

Research Grants & Funding

2021 **National Natural Science Foundation of China**, Key Personnel. Contributed to lab-funded research in AI for medical diagnostics under the supervision of the PI Prof. Jianping Li.

2021 **National High Technology Research and Development Program of China (863 Program)**, Grant No. 2021YFG0322, Contributing Researcher. Focused on deep learning models for biomedical image analysis.

2021 **Science and Technology Department of Chongqing Municipality**, Key Personnel. Participated in research on machine learning for regional healthcare solutions.

2021 **Science and Technology Research Program of Chongqing Municipal Education Commission**, Grant No. KJZD-K202114401, Contributing Researcher. Helped develop AI-based system for medical imaging interpretation.

2025 **CDUT AI Exploratory Research Fund**, Submitted as Principal Investigator under the Chengdu University of Technology Artificial Intelligence Center. Proposal Title: **"NeuroXSR-Net: Super-Resolution Neural Network for Low-Quality Brain MRI Enhancement and Tumor Diagnosis"**.

2025 **NSFC Young Scientist Fund Proposal**, Submitted as Principal Investigator under the Ministry of Information Science. Proposal Title: **"Causally-Explainable Super-Resolution Imaging for Low-Cost, Low-Radiation Multimodal Disease Diagnosis"**.

Appointments

Chengdu University of Technology Oxford Brookes College

Associate Professor

Computer Science Department, School of International Education, *April 2025–Till date.*

- Lead teaching, curriculum design, and research in AI, deep learning, machine vision, machine learning, neural networks, and image processing.
- Co-lead Instructor for the first CSC-sponsored International Summer School on AI-driven Sustainable Urban Development, earning the title of Outstanding Instructor — the first foreign lecturer to receive this honor at CDUT.
- Supervise undergraduate and graduate research projects, with student-led work published in top-tier journals such as *Computers and Electronics in Agriculture* (IF: 8.9) — a first for the College.
- Serve on multiple academic committees, including Programme Committee (Module Leader), Exam Board (Internal Examiner), and Computing Research Team (Co-Chair).
- Represent the department in national and international collaborations, delivering invited lectures and contributing to technical committees for major AI and computing conferences.

Senior Research Fellow

Computer Science Department, School of International Education, *August 2022–March 2025.*

- Delivered core modules including Machine Vision, Computer Networking, Circuit and Digital Logic, Databases, and Machine Learning to diverse international cohorts.
- Founded and co-chaired the Computing Research Team, fostering collaborative research and student innovation in AI, medical imaging, and energy informatics.
- Mentored over 40 students on graduate and undergraduate thesis, guiding them in advanced deep learning, AI-driven applications, and technical paper writing for international publication.
- Served as Technical Committee Member for ICACS 2024, PRAI, and other high-profile conferences, contributing to peer review and conference program development.
- Actively engaged in cross-border research projects, securing recognition through Best Paper and Best Oral Presentation Awards.

Teaching Experience

Chengdu University of Technology Oxford Brookes College

Module Leader

CHC 6781 Machine Vision | ***Computer Science Department***, *Autumn 2022–Present.*

- Design and deliver advanced machine vision course content for a class size of 116.
- Covered image processing fundamentals, feature extraction, object detection, and classification techniques.
- Conduct weekly practicals to demonstrate state-of-the-art computer vision tasks and implementation using Keras, and TensorFlow.
- Guided students in implementing real-world projects involving facial recognition, medical imaging, and automated inspection systems.
- Prepare mark sheets and rubrics for machine vision coursework.
- Administered and marked all assessments including exams, resits, and re-submissions.

Co-Instructor ***CHC 6089 Machine Learning | Software Engineering Department***, *Autumn 2022–Present*.

- Designed and delivered a comprehensive introduction to machine learning for a final-year undergraduate cohort.
- Covered supervised, unsupervised, and reinforcement learning paradigms, including key algorithms such as linear regression, decision trees, neural networks, clustering, PCA, anomaly detection, and Markov decision processes.
- Taught data preprocessing, feature selection, model evaluation, and interpretation techniques.
- Led hands-on labs using real-world datasets with popular ML frameworks.
- Prepared assignments, projects, and assessments to reinforce both theory and application.
- Administered and graded all evaluations, including projects, lab reports, resits, and re-submissions.

Module Leader ***CHC 4906 Computer Networking | Computer Science Department***, *Autumn 2022–Present*.

- Delivered an in-depth networking curriculum covering OSI and TCP/IP models, IPv4/IPv6 addressing, subnetting, and routing protocols.
- Guided students through configuring routers, switches, and wireless access points using Cisco Packet Tracer simulations.
- Conducted weekly labs capturing and analyzing network traffic with Wireshark, emphasizing network performance and security monitoring.
- Introduced firewall configuration, VLAN setup, and access control list (ACL) implementation.
- Designed assessments combining theoretical problem-solving with hands-on troubleshooting.
- Administered and marked all coursework, practical reports, resits, and re-submissions.

Module Leader ***CHC 4001 Circuit and Digital Logic | Computer Science Department***, *Spring 2023–Present*.

- Delivered course content covering number systems, logic gates, Boolean algebra, combinational and sequential circuits, and memory units.
- Integrated theory with practical applications, including Arduino-based circuit programming and digital system design.
- Conducted weekly labs on breadboard prototyping, component testing, and sensor-actuator interfacing.
- Guided students in developing mini-projects such as traffic light controllers, digital counters, and automated sensor systems.
- Designed rubrics and quizzes that assess both problem-solving skills and practical implementation.
- Administered and marked all assessments including practical projects, resits, and re-submissions.

Co-Instructor ***CHC 5049 Databases | Computer Science Department***, *Spring 2023–Present*.

- Delivered a comprehensive database systems curriculum covering relational model theory, SQL programming, indexing, transactions, and normalization up to BCNF.
- Conducted hands-on labs with MySQL and PostgreSQL for database creation, querying, optimization, and backup/recovery.
- Taught conceptual and logical design using ER diagrams, and mapped designs to physical schema implementation.
- Introduced students to NoSQL concepts, comparing document-oriented and relational approaches.
- Designed and assessed database projects simulating enterprise applications with multi-user access control.
- Administered and marked all assessments including practical exams, projects, resits, and re-submissions.

Supervision ***42 Students | OBU Computing***, *September 2022–Present*.

- Direct thesis supervision and mentoring of 42 graduate and undergraduate students.
- organizing weekly meetings to assess the progress of the student's work.
- Conducting weekly presentations for the student to display their progress report.
- Providing valuable suggestions to students on how to overcome bottlenecks in their projects.
- Vetting students' reports includes opening, mid-term, and final reports.
- coaching the students on implementing up-to-date deep learning algorithms for accomplishing their tasks.

Publications

Journal Articles

2025 **Monday, Happy Nkanta**, Grace Ugochi Nneji, Md Altab Hossin, Kelvin Davies Mark, Edwin Sunday Umana, Goodness Temofe Mgbejime, and Jianping Li. Enhancing ecg classification in cardiac diagnostics: A novel approach using adaptive focal cross-entropy loss function. *IEEE Journal of Biomedical and Health Informatics*, pages 1–17, 2025, **(Impact Factor:6.7)**.

2025 Grace Ugochi Nneji, Monday, Happy Nkanta, Venkat Subramanyam Reddy Pathapati, Saifun Nahar, Goodness Temofe Mgbejime, Edwin Sunday Umana, and Md Altab Hossin. Ffs-iml: fusion-based statistical feature selection for machine learning-driven interpretability of chronic kidney disease. *International Journal of Machine Learning and Cybernetics*, pages 1–34. Springer, 2025, **(Impact Factor:3.1)**.

2025 Xudong Li, Yutong Wang, **Happy Nkanta Monday**, and Grace Ugochi Nneji. A novel residual learning of multi-scale feature extraction model for the classification of rice grain varieties. *Computers and Electronics in Agriculture*, volume 237, pages 1–22, 2025, **(Impact Factor:8.9)**.

2024 Chiagoziem C Ukwuoma, Dongsheng Cai, Olusola Bamisile, Hongbo Yin, Grace Ugochi Nneji, **Monday, Happy N**, Ariyo Oluwasanmi, and Qi Huang. An attention fused sequence-to-sequence convolutional neural network for accurate solar irradiance forecasting and prediction using sky images. *Renewable Energy*, volume 237, page 121692. Elsevier, 2024, **(Impact Factor:9.0)**.

2024 Chukwuebuka Joseph Ejiyi, Zhen Qin, Chiagoziem Chima Ukwuoma, Grace Ugochi Nneji, **Monday, Happy Nkanta**, Makuachukwu Bennedith Ejiyi, Thomas Ugochukwu Ejiyi, Uchenna Okechukwu, and Olusola O Bamisile. Comparative performance analysis of boruta, shap, and borutashap for disease diagnosis: a study with multiple machine learning algorithms. *Network: Computation in Neural Systems*, pages 1–38. Taylor & Francis, 2024, **(Impact Factor:1.1)**.

2024 Chukwuebuka Joseph Ejiyi, Zhen Qin, **Monday, Happy**, Makuachukwu Bennedith Ejiyi, Chiagoziem Ukwuoma, Thomas Ugochukwu Ejiyi, Victor Kwaku Agbesi, Amarachi Agu, and Chiduzie Orakwue. Breast cancer diagnosis and management guided by data augmentation, utilizing an integrated framework of shap and random augmentation. *Biofactors*, volume 50, pages 114–134. Wiley Online Library, 2024, **(Impact Factor:5.0)**.

2024 Chukwuebuka Joseph Ejiyi, Zhen Qin, Grace Ugochi Nneji, **Monday, Happy Nkanta**, Victor K Agbesi, Makuachukwu Bennedith Ejiyi, Thomas Ugochukwu Ejiyi, and Olusola O Bamisile. Enhanced cardiovascular disease prediction modelling using machine learning techniques: a focus on cardiovitalnet. *Network: Computation in Neural Systems*, pages 1–33. Taylor & Francis, 2024, **(Impact Factor:1.1)**.

2023 Grace Ugochi Nneji, **Monday, Happy Nkanta**, Goodness Temofe Mgbejime, Venkat Subramanyam R Pathapati, Saifun Nahar, and Chiagoziem Chima Ukwuoma. Lightweight separable convolution network for breast cancer histopathological identification. *Diagnostics*, volume 13, page 299. MDPI, 2023, **(Impact Factor:3.7)**.

2023 Chukwuebuka Ejiyi, Zhen Qin, Makuachukwu Bennedith Ejiyi, Grace Ugochi Nneji, **Monday, Happy Nkanta**, Favour Amarachi Agu, Thomas Ugochukwu Ejiyi, Chidinma Diokpo, and Chiduzie Obed Orakwue. The internet of medical things in healthcare management: a review. *Journal of Digital Health*, pages 30–62, 2023.

2022 Chiagoziem C Ukwuoma, Qin Zhiguang, Md Belal Bin Heyat, Liaqat Ali, Zahra Almaspoor, and **Monday, Happy N**. Recent advancements in fruit detection and classification using deep learning techniques. *Mathematical Problems in Engineering*, volume 2022, page 9210947. Wiley Online Library, 2022, **(Impact Factor:1.1)**.

2022 Chiagoziem C Ukwuoma, Zhiguang Qin, Sophyani B Yussif, **Happy, Monday N**, Grace U Nneji, Gilbert C Urama, Chibueze D Ukwuoma, Nimo B Darkwa, and Harriet Agobah. Animal species detection and classification framework based on modified multi-scale attention mechanism and feature pyramid network. *Scientific African*, volume 16, page e01151. Elsevier, 2022, **(Impact Factor:2.7)**.

2022 Chiagoziem C Ukwuoma, Md Altab Hossain, Jehoiada K Jackson, Grace U Nneji, **Monday, Happy N**, and Zhiguang Qin. Multi-classification of breast cancer lesions in histopathological images using deep_pachi: Multiple self-attention head. *Diagnostics*, volume 12, page 1152. MDPI, 2022, **(Impact Factor:3.7)**.

2022 **Monday, Happy Nkanta**, Jianping Li, Grace Ugochi Nneji, Saifun Nahar, Md Altab Hossin, Jehoiada Jackson, and Ariyo Oluwasanmi. A wavelet convolutional capsule network with modified super resolution generative adversarial network for fault diagnosis and classification. ***Complex & Intelligent Systems***, pages 1–17. Springer, 2022, **(Impact Factor:5.0)**.

2022 **Happy Nkanta Monday**, Jianping Li, Grace Ugochi Nneji, Saifun Nahar, Md Altab Hossin, Jehoiada Jackson, and Chukwuebuka Joseph Ejiyi. Covid-19 diagnosis from chest x-ray images using a robust multi-resolution analysis siamese neural network with super-resolution convolutional neural network. ***Diagnostics***, volume 12, pages 741–766. MDPI, 2022, **(Impact Factor:3.7)**.

2022 **Happy Nkanta Monday**, Jianping Li, Grace Ugochi Nneji, Saifun Nahar, Md Altab Hossin, and Jehoiada Jackson. Covid-19 pneumonia classification based on neurowavelet capsule network. ***Healthcare***, volume 10, pages 422–441. MDPI, 2022, **(Impact Factor:2.6)**.

2022 **Happy Nkanta Monday**, Jianping Li, Grace Ugochi Nneji, Md Altab Hossin, Saifun Nahar, Jehoiada Jackson, and Ijeoma Amuche Chikwendu. Wmr-depthwisenet: A wavelet multi-resolution depthwise separable convolutional neural network for covid-19 diagnosis. ***Diagnostics***, volume 12, pages 765–788. MDPI, 2022, **(Impact Factor:3.7)**.

2022 Grace Ugochi Nneji, Jianhua Deng, **Happy Nkanta Monday**, Md Altab Hossin, Sandra Obiora, Saifun Nahar, and Jingye Cai. Covid-19 identification from low-quality computed tomography using a modified enhanced super-resolution generative adversarial network plus and siamese capsule network. ***Healthcare***, volume 10, pages 403–423. MDPI, 2022, **(Impact Factor:2.6)**.

2022 Grace Ugochi Nneji, Jingye Cai, **Monday, Happy Nkanta**, Md Altab Hossin, Saifun Nahar, Goodness Temofe Mgbejime, and Jianhua Deng. Fine-tuned siamese network with modified enhanced super-resolution gan plus based on low-quality chest x-ray images for covid-19 identification. ***Diagnostics***, volume 12, pages 717–743. MDPI, 2022, **(Impact Factor:3.706)**.

2022 Grace Ugochi Nneji, Jingye Cai, Jianhua Deng, **Monday, Happy Nkanta**, Edidiong Christopher James, and Chiagoziem Chima Ukwuoma. Multi-channel based image processing scheme for pneumonia identification. *Diagnostics*, volume 12, pages 325–351. MDPI, 2022, **(Impact Factor:3.7)**.

2022 Grace Ugochi Nneji, Jingye Cai, Jianhua Deng, **Monday, Happy Nkanta**, Md Altab Hossin, and Saifun Nahar. Identification of diabetic retinopathy using weighted fusion deep learning based on dual-channel fundus scans. ***Diagnostics***, volume 12, pages 540–559. MDPI, 2022, **(Impact Factor:3.7)**.

2022 Chukwuebuka Joseph Ejiyi, Zhen Qin, Abdulhaq Adetunji Salako, **Happy Nkanta Monday**, Grace Ugochi Nneji, Chiagoziem Chima Ukwuoma, Ijeoma Amuche Chikwendu, and Ji Gen. Comparative analysis of building insurance prediction using some machine learning algorithms. *International Journal of Interactive Multimedia & Artificial Intelligence*, volume 7. Universidad Internacional de La Rioja (UNIR), 2022, **(Impact Factor:3.1)**.

In Conference Proceedings

2024 Chang Yu, Xiyue Lin, Goodness T Mgbejime, Yaoqing Wang, and **Happy, Nkanta Monday*, Grace, Ugochi Nneji**. Super-resolution with rcan for improved malaria cell classification: A performance evaluation. In *2024 8th International Symposium on Computer Science and Intelligent Control (ISCSIC)*, pages 137–141. IEEE, 2024.

2024 Keliang Wu, Jincheng Peng, Xiang Feng, Zixuan Chen, **Monday, Happy Nkanta**, and Grace Ugochi Nneji. Attention-enhanced ensemble learning for diabetic retinopathy classification with interpretability. In *2024 IEEE 16th International Conference on Advanced Infocomm Technology (ICAIT)*, pages 228–233. IEEE, 2024.

2024 Yong Wang, Jiexuan Shen, Shi Li, Xinglin Li, **Monday, Happy Nkanta**, and Grace Ugochi Nneji. Evaluating the effectiveness of feature selection and explainable ai in predicting acute myocardial infarction using machine learning models. In *2024 5th International Conference on Machine Learning and Computer Application (ICMLCA)*, pages 6–10. IEEE, 2024.

2024 Yaoqing Wang, Chang Yu, Xiyue Lin, Goodness Temofe Mgbejime, **Monday, Happy Nkanta**, and Grace U Nneji. Leveraging ensemble deep learning model for fruit image recognition with explainable ai. In *2024 5th International Conference on Big Data & Artificial Intelligence & Software Engineering (ICBASE)*, pages 195–199. IEEE, 2024.

2024 Jiexuan Shen, Shi Li, Li Xinglin, Yong Wang, Grace Ugochi Nneji, and **Monday, Happy Nkanta**. Explainable ai for the prediction and estimation of obesity levels using machine learning models. In *2024 4th International Conference on Electronic Information Engineering and Computer Science (EIECS)*, pages 709–713. IEEE, 2024.

2024 Goodness Temofe Mgbejime, Yaoqing Wang, Chang Yu, Xiyue Lin, **Monday, Happy Nkanta**, and Grace Ugochi Nneji. Rice grain classification using attention-based ensemble learning model with explainable ai. In *2024 4th International Conference on Electronic Information Engineering and Computer Science (EIECS)*, pages 937–940. IEEE, 2024.

2024 Xiyue Lin, Goodness Temofe Mgbejime, Yaoqing Wang, Chang Yu, Grace Ugochi Nneji, and **Monday, Happy Nkanta***. Mask detection with an improved faster r-cnn. In *2024 17th International Conference on Advanced Computer Theory and Engineering (ICACTE)*, pages 216–220, 2024.

2024 Xinglin Li, Yong Wang, Jiexuan Shen, Shi Li, Grace Ugochi Nneji, and **Monday, Happy Nkanta**. Ensemble learning approach for car and tank image identification with explainable ai. In *2024 5th International Conference on Big Data & Artificial Intelligence & Software Engineering (ICBASE)*, pages 200–203. IEEE, 2024.

2024 Shi Li, Xinglin Li, Yong Wang, Jiexuan Shen, and Grace Ugochi Nneji **Happy Nkanta Monday***. Dependable ai machine learning models for the prediction of urinary system diseases. In *2024 17th International Conference on Advanced Computer Theory and Engineering (ICACTE)*, pages 366–370. IEEE, 2024.

2024 Xiang Feng, Zixuan Chen, Keliang Wu, Jincheng Peng, **Monday, Happy Nkanta**, and Grace Ugochi Nneji. Dual convolutional neural network with explainability attention mechanism for diabetic retinopathy classification. In *2024 7th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)*, pages 596–601. IEEE, 2024.

2024 Zixuan Chen, Keliang Wu, Xiang Feng, Grace Ugochi Nneji, **Monday, Happy Nkanta**, and Jincheng Peng. Enhancing brain tumor diagnosis: A cutting-edge ensemble deep learning approach. In *Proceedings of the 2024 8th International Conference on Algorithms, Computing and Systems*, pages 43–49, 2024.

2021 **Happy Nkanta Monday**, Jian Ping Li, Grace Ugochi Nneji, Abel Zenebe Yutra, Bona Debela Lemessa, Saifun Nahar, Edidiong Christopher James, and Amin Ul Haq. The capability of wavelet convolutional neural network for detecting cyber attack of distributed denial of service in smart grid. In *2021 18th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP)*, pages 413–418. IEEE, 2021.

2021 **Happy Nkanta Monday**, Jian Ping Li, Grace Ugochi Nneji, Ariyo Oluwasanmi, Goodness Temofe Mgbejime, Chukwuebuka Joseph Ejiyi, Ijeoma Amuche Chikwendu, and Edidiong Christopher James. Improved convolutional neural multi-resolution wavelet network for covid-19 pneumonia classification. In *2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)*, pages 267–273. IEEE, 2021.

2021 **Happy Nkanta Monday**, Jian Ping Li, Grace Ugochi Nneji, Edidiong Christopher James, Yobsan Bayisa Leta, Saifun Nahar, and Amin Ul Haq. Shared weighted continuous wavelet capsule network for electrocardiogram biometric identification. In *2021 18th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP)*, pages 419–425. IEEE, 2021.

2021 **Happy Nkanta Monday**, Jian Ping Li, Grace Ugochi Nneji, Edidiong Christopher James, Ijeoma Amuche Chikwendu, Chukwuebuka Joseph Ejiyi, Ariyo Oluwasanmi, and Goodness Temofe Mgbejime. The capability of multi resolution analysis: A case study of covid-19 diagnosis. In *2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)*, pages 236–242. IEEE, 2021.

2021 Grace U. Nneji, Jingye Cai, Jianhua Deng, **Monday, Happy N**., Edidiong C. James, Bona D. Lemessa, Abel Z. Yutra, Yobsan B. Leta, and Saifun Nahar. Covid-19 identification using deep capsule network: A perspective of super-resolution cnn on low-quality cxr images. In *2021 the 7th International Conference on Communication and Information Processing (ICCIP)*, page 96–102. Association for Computing Machinery (ACM), 2021.

2021 Nneji Grace Ugochi, Jingye Cai, Deng Jianhua, **Happy Nkanta Monday**, Chukwuebuka Joseph Ejiyi, Edidiong Christopher James, Goodness Temofe Mgbejime, and Ariyo Oluwasanmi. A super-resolution generative adversarial network with siamese cnn based on low quality for breast cancer identification. In *2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)*, pages 218–223. IEEE, 2021.

2021 Nneji Grace Ugochi, Jingye Cai, Deng Jianhua, **Happy Nkanta Monday**, Ijeoma Amuche Chikwendu, Ariyo Oluwasanmi, Edidiong Christopher James, and Goodness Temofe Mgbejime. Enhancing low quality in radiograph datasets using wavelet transform convolutional neural network and generative adversarial network for covid-19 identification. In *2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)*, pages 146–151. IEEE, 2021.

2021 Nneji Grace Ugochi, Jingye Cai, Jianhua Deng, **Happy Nkanta Monday**, Saifun Nahar, Goodness Temofe Mgbejime, Edidiong Christopher James, and Surafel Kifetew Woldeyes. A dual weighted shared capsule network for diabetic retinopathy fundus classification. In *2021 International Conference on High Performance Big Data and Intelligent Systems (HPBD&IS)*, pages 297–302. IEEE, 2021.

2018 **Monday, Happy N**, Jian P. Li, Mordecai F. Raji, Grace U. Nneji, Abel Ogunzbile, and Richard I. Nneji. Construction of equivalent model of patch antenna using magnetic dipole. In *2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)*, pages 645–649, 2018.

2018 **Monday, Happy N**, Jian P. Li, Mordecai F. Raji, Grace U. Nneji, Ifeanyi D. Dike, and Richard I. Nneji. Fast prediction of equivalent model of installed patch antenna radiation pattern. In *2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)*, pages 286–291, 2018.

2018 **Happy Nkanta Monday**, Jian Ping Li, Grace Ugochi Nneji, Chiagoziem C. Ukwuoma, Ifeanyi D. Dike, and Richard I. Nneii. Design of an improved cost effective electronic locking system. *2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)*, pages 493–499. IEEE, 2018.

2018 **Happy Nkanta Monday**, Jian Ping Li, Grace Ugochi Nneji, Ifeanyi D. Dike, David Agomuo, and Abel Ogungbile. Enhanced attendance management system: A biometrics system of identification based on fingerprint. *2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)*, pages 500–505. IEEE, 2018.

Project

2019–2021 ***Machine Learning & Deep learning***.

- Applied deep learning to medical images for disease diagnosis
- Implemented CNN for vehicle type recognition
- Implemented CNN for biometric identification using Electrocardiogram (ECG)
- Applied CNN for detecting distributed denial of service (DDoS) attacks in smart grid

Research Interests

Computer Vision & Image Processing

Explainable Artificial Intelligence

AI Applications in Bioinformatic & Industrial Informatics

Conversational Agentic AI

Large Language Models (LLMs) and Retrieval-Augmented Generation (RAG)

Academic Achievements & Recognitions

2025 **Outstanding Instructor Award** - First foreign lecturer in Chengdu University of Technology to receive this recognition, awarded for co-leading the *AI-Driven Sustainable Urban Development Program*, the first summer school program sponsored by the Chinese Government Scholarship (CSC) at CDUT.(*News*)

2025 **First student-led publication** under Dr. Happy's supervision in top-tier journal *Computers and Electronics in Agriculture* (IF: 8.9), a first for Chengdu University of Technology Oxford Brookes College. (*CDUT News*)

2021 **Best paper Award**, 2021 the 4^{th} International Conference on Pattern Recognition and Artificial Intelligence (PRAI), Yibin, Sichuan, China, August 20–22, 2021

2024 **Best Oral Presentation Award** , 2024 the 16^{th} International Conference on Advanced Information Technology (ICAIT'2024), Enshi, China, July 24–27, 2024

2019–2020 1^{st} Prize, Academic Achievement Award, Doctoral category

2019–2020 2^{nd} Prize, Excellence Performance Award, Doctoral category

2017–2018 1^{st} Prize, Excellence Performance Award, Masters' Category

2017–2018 2^{nd} Prize, Academic Achievement Award, Masters' Category

2017–2018 2^{nd} Best student, School of Electronic Science and Engineering, Masters' Category

Scholarship

2018–2022 Recipient of the ***University Full Scholarship*** for Doctoral Research Program, awarded by the University of Electronic Science and Technology of China (UESTC).

2016–2018 Recipient of the ***University Partial Scholarship*** for Masters' Research Program, awarded by the University of Electronic Science and Technology of China (UESTC).

Skills & Tools

Machine Learning	Deep learning, Computer vision, Supervised & Unsupervised learning, Image processing
Framework & Libraries	OpenCV, Keras, TensorFlow, Numpy, Scikit-learn, Pandas, HuggingFace
Programming	Python, LaTex, R, SQL
Data Science & Visualization	Matplotlib, Seaborn, Power BI, Tableau
Tools	Jupyter, Github, Flask, Streamlit, Cisco Packet Tracer, Wireshark, Arduino

Journal Peer-Review

2024–present	IEEE Transactions on Industrial Informatics
2024–present	Biomedical Signal Processing and Control
2024–present	International Journal of Machine Learning and Cybernetics
2023–present	Applied Artificial Intelligence
2023–present	Open Science Journal
2022–present	Imaging Science Journal
2022–present	Peer J
2022–present	IJIMAI
2021–present	Journal of Medical Internet Research
2020–present	JMIR Research Protocol
2019–present	JMIR Medical Informatics
2019–present	Scientific Reports
2019–present	Expert Systems with Applications
2019–present	Mathematics

Professional Certificate

2024	Generative AI - IBM
2024	Data Science Professional Certificate - IBM
2024	Data Analytics Professional Certificate - Google
2024	Developing AI Applications with Python and Flask - IBM
2023	Deep Learning Specialization - Stanford University & DeepLearning.AI

Leadership, Voluntary & Services

August 2025	**Technical Committee Member**, IEEE 8th International Conference on Pattern Recognition and Artificial Intelligence (PRAI 2025)
June–July 2025	**Co-Lead Instructor**, Chengdu University of Technology International Summer School Program on AI-Driven Sustainable Urban Development Program.
May 2025 – Present	**Team Lead**, Tianjiao Community Service and Development, Chengdu, Sichuan
April 2025	**Research Mentor**, Student Publication in Computers and Electronics in Agriculture (Impact Factor:8.9)
February 2025–Present	**Technical Committee Member**, PRAI 2025 Conference

October 2024	**Technical Committee Member**, 8th International Conference on Algorithms, Computing and Systems (ICACS 2024), Hong Kong
September 2024	**Foreign Expert Nominee**, Ministry of Foreign Expert Bureau, Foreign Expert Workshop "Walk into the Glamorous Chengdu"
August 2024	**Awardee**, ICAIT 2024 Best Oral Presentation, "Attention-Enhanced Ensemble Learning for Diabetic Retinopathy Classification"
March 2024–Present	**Internal Examiner**, Exam Board Committee, CDUT – Oxford Brookes Program
February 2024–Present	**Technical Committee Member**, International Computer Conference on Wavelet Active Media Technology and Information Processing
April 2024–Present	**Module Leader**, Programme Committee, CDUT – Oxford Brookes Program
September 2022 – Present	**Co-Chair**, Computing Research Team, Oxford Brookes College, CDUT
January 2021	**Distinguished Judge**, USAD CHIN
2021–2022	**Team member**, *Tianjiao Community Service and Development*, Chengdu, Sichuan.
2019–2020	**Team lead**, *Academic Research Mentoring*, University of Electronic Science and Technology of China, UESTC.
2018–2019	**Team lead** , *AI project Camp*, University of Electronic Science and Technology of China, UESTC.

Referees

Available upon request