# Dr. Happy Monday

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## Summary

A passionate computer vision and deep learning expert with years of research experience and a PhD in Computer Science and Engineering. As a Senior Researcher and Lecturer at Oxford Brookes University of Chengdu University of Technology, a Sino-British collaborative education program, I am driven by the desire to bridge advanced computational techniques with practical applications in medical imaging and Al. 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 50 papers and achieving significant recognition for my contributions such as the "Best Paper Award" at the 2021 International Conference on Pattern Recognition and AI (PRAI). I am dedicated to advancing the state of AI through innovative methodologies. My works have received over 653 citations and 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.

G Github

Web of Science Google Scholar Orcid Stackoverflow Personal Website

#### Education

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

Research Medical image processing, Deep learning, Machine learning, Computer vision, Data analysis, Area: Wavelet transform, Data acquisition and analysis, Signal data processing, Machine fault diagnosis, Multi-resolution analysis, ECG biometric identification

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.

Research Machine learning, Electromagnetic compatibility (EMC), Supervised and Unsupervised learning,

Area: Fault diagnosis, Patch antenna

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

2014: Bachelor of Engineering, Agricultural Engineering, Federal University of Technology, Akure, Nigeria.

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

#### **Publications**

## Journal Articles

Paper Title: Enhanced Cardiovascular Disease Prediction Modelling using Machine Learning Techniques: A Focus on CardioVitalnet

Authors: Chukwuebuka Joseph Ejiyi, Zhen Qin, Grace Ugochi Nneji, Happy Nkanta Monday, Victor K.

Agbesi, Makuachukwu Bennedith Ejiyi, Thomas Ugochukwu Ejiyi, Olusola O. Bamisile

Journal: Network: Computation in Neural Systems

Date: 2024

Paper Title: Comparative performance analysis of Boruta, SHAP, and Borutashap for disease diag-

nosis: A study with multiple machine learning algorithms

Authors: Chukwuebuka Joseph Ejiyi, Zhen Qin, Chiagoziem Chima Ukwuoma, Grace Ugochi Nneji,

Happy Nkanta Monday, Makuachukwu Bennedith Ejiyi, Thomas Ugochukwu Ejiyi, Uchenna

Okechukwu, Olusola O. Bamisile

Journal: Network: Computation in Neural Systems

Date: 2024

Paper Title: Breast cancer diagnosis and management guided by data augmentation, utilizing an

integrated framework of shap and random augmentation

Authors: Chukwuebuka Joseph Ejiyi, Zhen Qin, Happy Monday, Makuachukwu Bennedith Ejiyi, Chi-

agoziem Ukwuoma, Thomas Ugochukwu Ejiyi, Victor Kwaku Agbesi, Amarachi Agu, and

Chiduzie Orakwue

Journal: Biofactors

Date: 2024

Paper Title: Lightweight separable convolution network for breast cancer histopathological identifi-

cation

Authors: Grace Ugochi Nneji, Happy Nkanta Monday, Goodness Temofe Mgbejime, Venkat Subra-

manyam R. Pathapati, Saifun Nahar, and Chiagoziem Chima Ukwuoma

Journal: Diagnostics

Date: 2023

Paper Title: The Internet of Medical Things in Healthcare Management: A Review

Authors: Chukwuebuka Joseph Ejiyi, Zhen Qin, Makuachukwu Bennedith Ejiyi, Grace Ugochi Nneji,

Happy Nkanta Monday, Favour Amarachi Agu, Thomas Ugochukwu Ejiyi, Chidinma Diokpo,

Chiduzie Obed Orakwue

Journal: Journal of Digital Health

Date: 2023

Paper Title: Automated lung-related pneumonia and covid-19 detection based on novel feature ex-

traction framework and vision transformer approaches using chest x-ray images

Authors: Chiagoziem Chima Ukwuoma, Zhi-Quang Qin, Md Belal Bin Heyat, Faijan Akhtar, Abla Smahi,

Jehoiada Jackson, Syed Furqan Qadri, Abdullah Yahya Mohammed Muaad, Happy Nkanta

Monday, and Grace Ugochi Nneji

Journal: Bioengineering

Date: 2022

Paper Title: Multi-classification of breast cancer lesions in histopathological images using deep\_pachi:

Multiple self-attention head

Authors: Chiagoziem Chima Ukwuoma, Md. Altab Hossain, Jehoiada Jackson, Grace Ugochi Nneji,

Happy Nkanta Monday, and Zhi-Quang Qin

Journal: Diagnostics

Date: 2022

Paper Title: A wavelet convolutional capsule network with modified super-resolution generative ad-

versarial network for fault diagnosis and classification

Authors: Happy Nkanta Monday, Jianping Li, Grace Ugochi Nneji, Saifun Nahar, Md Altab Hossin,

Jehoiada Jackson, and Ariyo Oluwasanmi

Journal: Complex & Intelligent Systems

Date: 2022

Paper Title: Covid-19 diagnosis from chest x-ray images using a robust multi-resolution analysis

siamese neural network with super-resolution convolutional neural network

Authors: Happy Nkanta Monday, Jianping Li, Grace Ugochi Nneji, Saifun Nahar, Md Altab Hossin,

Jehoiada Jackson, and Chukwuebuka Joseph Ejiyi

Journal: Diagnostics

Date: 2022

Paper Title: Covid-19 pneumonia classification based on neuro wavelet capsule network

Authors: Happy Nkanta Monday, Jianping Li, Grace Ugochi Nneji, Saifun Nahar, Md Altab Hossin, and

Jehoiada Jackson

Journal: Healthcare

Date: 2022

Paper Title: Wmr-depthwisenet: A wavelet multi-resolution depthwise separable convolutional neural

network for covid-19 diagnosis

Authors: Happy Nkanta Monday, Jianping Li, Grace Ugochi Nneji, Md Altab Hossin, Saifun Nahar,

Jehoiada Jackson, and Ijeoma Amuche Chikwendu

Journal: Diagnostics

Date: 2022

Paper Title: Covid-19 identification from low-quality computed tomography using a modified en-

hanced super-resolution generative adversarial network plus and siamese capsule net-

work

Authors: Grace Ugochi Nneji, Jianhua Deng, Happy Nkanta Monday, Md Altab Hossin, Sandra Obiora,

Saifun Nahar, and Jingye Cai

Journal: Healthcare

Date: 2022

Paper Title: Fine-tuned siamese network with modified enhanced super-resolution gan plus based on

low-quality chest x-ray images for covid-19 identification

Authors: Grace Ugochi Nneji, Jingye Cai, Jianhua Deng, Happy Nkanta Monday, Md Altab Hossin,

Saifun Nahar, Goodness Temofe Mgbejime, and Jianhua Deng

Journal: Diagnostics

Date: 2022

Paper Title: Multi-channel based image processing scheme for pneumonia identification

Authors: Grace Ugochi Nneji, Jingye Cai, Jianhua Deng, Happy Nkanta Monday, Md Altab Hossin,

Saifun Nahar, and Sandra Obiora

Journal: Diagnostics

Date: 2022

Paper Title: Identification of diabetic retinopathy using weighted fusion deep learning based on dual-

channel fundus scans

Authors: Grace Ugochi Nneji, Jingye Cai, Jianhua Deng, Happy Nkanta Monday, Md Altab Hossin, and

Saifun Nahar

Journal: Diagnostics

Date: 2022

Paper Title: Parallelistic convolution neural network approach for brain tumor diagnosis

Authors: Goodness Temofe Mgbejime, Md Altab Hossin, Grace Ugochi Nneji, Happy Nkanta Monday,

and Favour Ekong

Journal: Diagnostics

Date: 2022

Paper Title: Comparative analysis of building insurance prediction using some machine learning algo-

rithms

Authors: Chukwuebuka Joseph Ejiyi, Zhen Qin, Abdulhaq Adetunji Salako, Happy Nkanta Monday,

Grace Ugochi Nneji, Chiagoziem Chima Ukwuoma, Ijeoma Amuche Chikwendu, and Ji Gen

Journal: International Journal of Interactive Multimedia & Artificial Intelligence

Date: 2022

Paper Title: Federated learning-based detection of invasive carcinoma of no special type with

histopathological images

Authors: Bless Lord Y. Agbley, Jianping Li, Md Altab Hossin, Grace Ugochi Nneji, Jehoiada Jackson,

Happy Nkanta Monday, and Edidiong Christopher James

Journal: Diagnostics

Date: 2022

Paper Title: Evae-net: An ensemble variational autoencoder deep learning network for COVID-19

classification based on chest X-ray images

Authors: Daniel Addo, Shijie Zhou, Jehoiada Jackson, Grace Ugochi Nneji, Happy Nkanta Monday,

Kwabena Sarpong, Rutherford Agbeshi Patamia, Favour Ekong, and Christyn Akosua Owusu-

Agyei

Journal: Diagnostics

Date: 2022

Paper Title: Recent Advancements in Fruit Detection and Classification Using Deep Learning Techniques

Authors: Chiagoziem C. Ukwuoma, Qin Zhiguang, Md Belal Bin Heyat, Liaqat Ali, Zahra Almaspoor,

Happy N. Monday

Journal: Mathematical Problems in Engineering

Date: 2022

Paper Title: Animal species detection and classification framework based on modified multi-scale

attention mechanism and feature pyramid network

Authors: Chiagoziem C. Ukwuoma, Zhiguang Qin, Sophyani B. Yussif, Monday N. Happy, Grace U.

Nneji, Gilbert C. Urama, Chibueze D. Ukwuoma, Nimo B. Darkwa, Harriet Agobah

Journal: Scientific African

Date: 2022

Paper Title: Fast Optimization of Sparse Antenna Array Using Numerical Green's Function and Ge-

netic Algorithm

Authors: Mordecai F. Raji, Huapeng Zhao, Happy N. Monday

Journal: International Journal of Numerical Modelling Electronic Networks Devices

Date: 2019

In Conference Proceedings

Paper Title: The capability of wavelet convolutional neural network for detecting cyber attacks of

distributed denial of service in smart grid

Authors: Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Abel Zenebe Yutra, Bona Debela

Lemessa, Saifun Nahar, Edidiong Christopher James, and Amin UI Haq

Conference: 2021 18th International Computer Conference on Wavelet Active Media Technology and Infor-

mation Processing (ICCWAMTIP)

Date: 2021

Paper Title: Improved convolutional neural multi-resolution wavelet network for COVID-19 Pneumo-

nia classification

Authors: Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Ariyo Oluwasanmi, Goodness

Temofe Mgbejime, Chukwuebuka Joseph Ejiyi, Ijeoma Amuche Chikwendu, and Edidiong Christo-

pher James

Conference: 2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)

Date: 2021

Paper Title: Shared weighted continuous wavelet capsule network for electrocardiogram biometric

identification

Authors: Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Edidiong Christopher James, Yobsan

Bayisa Leta, Saifun Nahar, and Amin UI Haq

Conference: 2021 18th International Computer Conference on Wavelet Active Media Technology and Infor-

mation Processing (ICCWAMTIP)

Date: 2021

Paper Title: The Capability of multi-resolution Analysis: A Case Study of Covid-19 Diagnosis

Authors: Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Edidiong Christopher James, Ijeoma

Amuche Chikwendu, Chukwuebuka Joseph Ejiyi, Ariyo Oluwasanmi, and Goodness Temofe Mg-

bejime

Conference: 2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)

Date: 2021

Paper Title: Covid-19 identification using deep capsule network: A perspective of super-resolution

cnn on low-quality CXR images

Authors: Grace U. Nneji, Jingye Cai, Jianhua Deng, Happy N. Monday, Edidiong C. James, Bona D.

Lemessa, Abel Z. Yutra, Yobsan B. Leta, and Saifun Nahar

Conference: 2021 the 7th International Conference on Communication and Information Processing (ICCIP)

Date: 2021

Paper Title: A super-resolution generative adversarial network with Siamese CNN based on low qual-

ity for breast cancer identification

Authors: Grace Ugochi Nneji, Jingye Cai, Deng Jianhua, Happy Nkanta Monday, Chukwuebuka Joseph

Ejiyi, Edidiong Christopher James, Goodness Temofe Mgbejime, and Ariyo Oluwasanmi

Conference: 2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)

Date: 2021

Paper Title: Enhancing low quality in radiograph datasets using wavelet transform convolutional

neural network and generative adversarial network for covid-19 identification

Authors: Grace Ugochi Nneji, Jingye Cai, Deng Jianhua, Happy Nkanta Monday, Ijeoma Amuche Chik-

wendu, Ariyo Oluwasanmi, Edidiong Christopher James, and Goodness Temofe Mgbejime

Conference: 2021 4th International Conference on Pattern Recognition and Artificial Intelligence (PRAI)

Date: 2021

Paper Title: A dual weighted shared capsule network for diabetic retinopathy fundus classification

Authors: Grace Ugochi Nneji, Jingye Cai, Jianhua Deng, Happy Nkanta Monday, Saifun Nahar, Good-

ness Temofe Mgbejime, Edidiong Christopher James, and Surafel Kifetew Woldeyes

Conference: 2021 International Conference on High Performance Big Data and Intelligent Systems (HPBD

& IS)

Date: 2021

Paper Title: Analyzing data mining and its application to smart business

Authors: Saifun Nahar, Ting Zhong, Happy Nkanta Monday, Grace Ugochi Nneji, Michael O Mills, and

Hassan S Abubakar

Conference: 2019 4th Technology Innovation Management and Engineering Science International Conference

(TIMES-iCON)

Date: 2019

Paper Title: A survey on data stream mining towards the internet of things application

Authors: Saifun Nahar, Ting Zhong, Happy Nkanta Monday, Michael O Mills, Grace Ugochi Nneji, and

Hassan S Abubakar

Conference: 2019 4th Technology Innovation Management and Engineering Science International Conference

(TIMES-iCON)

Date: 2019

Paper Title: Medical Image Encryption into Smart Healthcare IoT System

Authors: Jalaluddin Khan, Jianping Li, Amin Ul Haq, Shadma Parveen, Ghufran Ahmad Khan, Mohammad

Shahid, Happy N. Monday, Sana Ullah, Sun Ruinan

Conference: 2019 16th International Computer Conference on Wavelet Active Media Technology and Infor-

mation Processing (ICCWAMTIP)

Date: 2019

Paper Title: A Survey on Hand-Based Behavioral Activity Recognition

Authors: Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Mordecai Folarin Raji, Chima

C. Ukwuoma, Jalaluddin Khan, Chukwuebuka J. Ejiyi, Amin Ulhaq, Saifun Nahar, Hassan S.

Abubakar, Chikwendu A. Ijeoma

Conference: 2019 16th International Computer Conference on Wavelet Active Media Technology and Infor-

mation Processing (ICCWAMTIP)

Date: 2019

Paper Title: Identifying the Predictive Capability of Machine Learning Classifiers for Designing Heart

**Disease Detection System** 

Authors: Amin Ul Haq, Jianping Li, Jalaluddin Khan, Muhammad Hammad Memon, Shadma Parveen,

Mordecai Folarin Raji, Wasif Akbar, Tanvir Ahmad, Sana Ullah, Latipova Shoista, Happy N.

Monday

Conference: 2019 16th International Computer Conference on Wavelet Active Media Technology and Infor-

mation Processing (ICCWAMTIP)

Date: 2019

Paper Title: Performance Evaluation of Orthogonal Wavelet Division Multiplex for 5G and Beyond

Authors: Mordecai F. Raji, Jian Ping Li, Amin Ul Haq, Emmanuel Raji, Happy N. Monday

Conference: 2019 16th International Computer Conference on Wavelet Active Media Technology and Infor-

mation Processing (ICCWAMTIP)

Date: 2019

Paper Title: Construction of equivalent model of patch antenna using magnetic dipole

Authors: Happy N. Monday, Jian P. Li, Mordecai F. Raji, Grace U. Nneji, Abel Ogungbile, and Richard

I. Nneji

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: Fast prediction of equivalent model of installed patch antenna radiation pattern

Authors: Happy N. Monday, Jian P. Li, Mordecai F. Raji, Grace U. Nneji, Ifeanyi D. Dike, and Richard

I. Nneji

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: Design of an improved cost-effective electronic locking system

Authors: Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Chiagoziem C. Ukwuoma, Ifeanyi

D. Dike, and Richard I. Nneii

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: Ensuring data governance and enhancing data security in a private cloud environment

Authors: Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Chiagoziem C. Ukwuoma, David

Agomuo, and Richard I. Nneji

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: Enhanced attendance management system: A biometrics system of identification based

on fingerprint

Authors: Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Ifeanyi D. Dike, David Agomuo,

and Abel Ogungbile

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: A collaborative learning approach for integrated time-based online environment

Authors: Grace Ugochi Nneji, Jianhua Deng, Happy Nkanta Monday, Sarder S Shakher, Basil C Mbonu,

and Abel Ogungbile

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: Online collaborative approach of interactive antenatal lectures for expectant mothers

Authors: Grace Ugochi Nneji, Jianhua Deng, Happy Nkanta Monday, Sarder S Shakher, Basil C Mbonu,

and Mercy C Nneji

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: A multimedia computer-aided learning software

Authors: Grace Ugochi Nneji, Jianhua Deng, Happy Nkanta Monday, Sarder S Shakher, David Agomuo,

and Chiagoziem C Ukwuoma

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: An improved e-clearance management system for graduating students in a university

environment

Authors: Grace Ugochi Nneji, Jianhua Deng, Happy Nkanta Monday, Sarder S Shakher, David Agomuo,

and Ifeanyi D Dike

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: Android-based information system for marriage counseling

Authors: Grace Ugochi Nneji, Jianhua Deng, Happy Nkanta Monday, Sarder S Shakher, David Agomuo,

and Chiagoziem C Ukwuoma

Conference: 2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Confer-

ence (IEMCON)

Date: 2018

Paper Title: Design of Ultra-low-end Controllers for Efficient Stepper Motor Control

Authors: Mordecai Raji, Akeem Shokanbi, Happy N. Monday

Conference: MATEC Web of Conferences

Date: 2018

## Research Experience

## University of Electronic Science and Technology of China

## Sept.2018– Machine Learning & Deep Learning | Research Assistant: International Centre for June 2022 Wavelet Analysis and Its applications, UESTC.

- Developed a Depthwise Separable Convolutional Network with Wavelet Multi-Resolution Analysis module to automatically learn details both spatial-wise and channel-wise for COVID-19 identification with limited Chest X-ray and CT scans which is critical due to the rapid growth of COVID-19.
- Developed a Super Resolution based Siamese Wavelet Multi-Resolution Convolutional Neural Network for pneumonia classification using chest x-ray images.
- Developed a novel Neuro-Wavelet Capsule framework for classifying pneumonia.
- Developed a novel Continuous Wavelet Convolutional Capsule Network with a Super-Resolution Generative Adversarial Network for machine fault diagnosis and classification.
- Developed a Shared Weighted Continuous Wavelet Capsule Network with Siamese Capsule Network framework for Electrocardiogram (ECG) biometric identification.
- Developed a novel end-to-end Continuous Wavelet Transform with Convolutional Neural Network for the detection of distributed denial of service (DDoS) attacks on smart grid infrastructure.
- Developed an enhanced Convolutional Neural Multi-Resolution Analysis algorithm for COVID-19 pneumonia diagnosis capable of handling few datasets which is very paramount due to the fast emergence of COVID-19.
- Investigated the application of Wavelet Transform and developed Wavelet-based Convolutional Neural Network for the classification of COVID-19 patients using chest radiography.
- Organized deep learning workshop for undergraduate students
- Supervised and mentored graduate students in paper publication and thesis formatting using LaTex software

Advisor: **Prof. Jianping Li**, *Professor, School of Computer Science & Engineering*, University of Electronic Science and Technology of China (*VESTC website*), (*ICCWAMTIP Website*)

## Teaching Experience

## Oxford Brookes University-Chengdu University of Technology (OBU-CDUT)

## Module Machine Vision | Computer Science Department, September 2022-Till date.

- Design and deliver machine vision course content to final-year undergraduate students with a class size of 116.
- Conduct weekly practicals to demonstrate state-of-the-art computer vision tasks and implementation using Matlab, Keras, and TensorFlow.
- Prepare mark sheets and rubrics for machine vision coursework.
- o Administered and marked all assessments including exams, resits, and re-submissions.

#### Module Computer Networking | Computer Science Department, September 2022-Till date.

- Design and deliver basic communication and PC networking course content to second-year undergraduate students with a class size of 112.
- Conduct weekly practicals to demonstrate the live simulation of network configurations and subnetting using Cisco Packet Tracer.
- o Conduct weekly practicals to capture and analyze network data traffic using Wireshark software.
- Prepare weekly quizzes and seminar tasks for the computer networking course.
- Administered and marked all assessments including weekly quizzes, practical reports, resits, and resubmissions.

#### Module Circuit and Digital Logic | Computer Science Department, February 2023–Till date.

- Design and deliver circuit and digital logic course content to second-year undergraduate students with a class size of 112.
- Conduct weekly practicals to demonstrate the practical programming of the electronic circuits using Arduino IDE and Arduino Uno hardware.
- Conduct weekly practicals to demonstrate the circuit connections using a solderless breadboard and electronic components.
- Prepare weekly guizzes and seminar tasks for the circuit and digital logic.
- Administered and marked all assessments including weekly quizzes, practical reports, resits, and resubmissions.

## Supervision 32 Project Students | OBU Computing, September 2022 - Till data.

- Direct project supervision and mentoring of 32 final-year undergraduate students.
- o 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.

## University of Electronic Science and Technology of China

## Module *Machine Learning & Deep Learning*, September 2018–June 2022.

- Instruct graduate students and assist them with laboratory implementation of deep learning model and drafting technical manuscripts
- Perform practical coding sessions for students in the machine learning course
- Help undergraduate students employ what they learn in deep learning courses in collecting and preprocessing datasets for model training
- Demonstrate how some of the most important concepts in machine learning are used in real-world applications
- Work intensively with graduate and undergraduate students throughout the semester, from implementing deep learning models to writing academic papers to assist them in developing research skills.

## Project

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

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

## Academic Achievements & Recognitions

- 2021 Best paper Award, 2021 the  $4^{th}$  International Conference on Pattern Recognition and Artificial Intelligence (PRAI), Yibin, Sichuan, China, August 20–22, 2021
- 2019–2020 1st Prize, Academic Achievement Award, Doctoral category
- 2019–2020 2<sup>nd</sup> Prize, Excellence Performance Award, Doctoral category
- 2017–2018 1st Prize, Excellence Performance Award, Masters' Category
- 2017–2018 2<sup>nd</sup> Prize, Academic Achievement Award, Masters' Category
- 2017–2018 2<sup>nd</sup> 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

- Skills Deep learning, Computer vision, Machine learning, Image processing
- Tools & OpenCV, Matplotlib, Keras, TensorFlow, Numpy, Scikit-learn, Pandas, R-Studio, MySQL, Big-

Libraries Query

Programming Python, LaTex, R, SQL

#### 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 Al Applications with Python and Flask IBM
- 2023 Deep Learning Specialization Stanford University & DeepLearning.Al

## Leadership & Voluntary

- 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**, Al project Camp, University of Electronic Science and Technology of China, UESTC.
- 2017-2018 **Student Union Electoral Chairman**, University of Electronic Science and Technology of China, UESTC.