

ONASOGA, OLUKAYODE AYODELE, PhD

Address: 57A, Jalan Teja, 8/3 Teman Teja, Changlun, Kedah, Malaysia
Telephone: +60149690938
Email: konasoga@yahoo.com

Professional Summary

A dynamic and results-driven academic, researcher and educator with progressive experience and expertise in Artificial Intelligence, Deep Learning, Machine Learning, and Data Science. Demonstrated expertise in curriculum design, interdisciplinary research, and student-centered pedagogy across undergraduate and postgraduate levels. I boast a strong record of peer-reviewed publications, successful grant acquisition, and supervision of MSc and PhD students, which has led to impactful academic and industry outcomes. Adept at integrating innovative AI techniques in healthcare, finance, education, and policy domains. As a strategic collaborator in international research networks and partnerships with industry and government agencies, I am passionate about fostering inclusive learning environments and contributing to institutional growth through teaching, research, and academic service.

Key Competences

- Research & Publications
- Artificial Intelligence & Deep Learning
- Data Science & Machine Learning
- Problem Solving & Critical Thinking
- Academic Writing & Conference Presentations
- Predictive Analytics
- Teaching, Learning & Curriculum Development
- Academic Leadership, Institutional Service & Team Collaboration
- Supervision & Mentorship (Postgraduate & Undergraduate)
- Interdisciplinary & Industry Collaboration
- Program Accreditation & Quality Assurance
- Grant Writing & Research Funding

Academic & Research Experience

Research Associate : Data Science Research (DSRL), School of Computing, UUM College of Arts & Sciences

Research Collaboration with School of Technology Management and Logistics, UUM College of Business and Pejabat Perikanan Negeri Kedah.

Responsibilities / Accomplishments:

- Innovative research driven by demand through the Jabatan Perikanan Malaysia grant/funding under the project title “Smart Aquaculture through Machine Learning and IoT”.

Date Analyst - Data Science Research (DSRL), UUM College of Arts & Sciences

Extensive academic and research background in AI, Deep Learning and Data Science, with a strong record of curriculum design, interdisciplinary research, postgraduate supervision, funded projects, and high-impact scholarly publications.

Responsibilities / Accomplishments:

- **Curriculum Development & Innovation:** Contributed to undergraduate and postgraduate program enhancement, ensuring alignment with industry standards.
 - **Teaching & Learning:** Delivered courses in Machine Learning, Deep Learning, and AI Ethics, achieving high student satisfaction ratings.
 - **Postgraduate Project Evaluation:** Successfully evaluated and supervised MSc students, leading to impactful publications and industry placements.
 - **Interdisciplinary Research & Grant Acquisition:** Assisted in writing grant proposals to secure funding and align research objectives with grant requirements.
 - **Academic Leadership:** Served on departmental and faculty committees, contributing to governance, accreditation, and student mentorship programs.
-

-
- **Research Design & Problem Definition:** Conducted research in machine learning, deep learning, and AI-driven data analytics.
 - **Model Development and Algorithm Design:** Developed machine learning models for classification, clustering, and predictive analytics.
 - **Academic Writing & Publication:** Published high-impact research papers in peer-reviewed journals.
 - **Mentorship:** Provided mentorship and guidance to junior researchers and postgraduate students.
-

Paper Reviewer & Conference Organizer / Contributor

Actively engaged in academic peer review and conference organization, contributing to the advancement of research in Artificial Intelligence, Data Science, and AI for Finance and Accounting. Served as a reviewer for international conferences, ensuring scholarly rigor and quality. Participated as a program committee member and session chair for various AI and technology symposia. Recognized for insightful and constructive feedback that strengthens research output. These roles demonstrate a strong commitment to academic service, knowledge dissemination, and staying at the forefront of emerging scientific trends.

Accomplishments:

- The 1st International Conference on Emerging Systems and Advanced Technology (ICoESAT 2025), 14 & 15 April 2025, Hybrid . ICoESAT 2025 Hosted by Gulf Colleges Saudi Arabia.
- Digital Zone: Jurnal Teknologi Informasi dan Komunikasi, SINTA 3, Indonesia.
- The 2nd IEEE International Conference on Fundamental Applied Sciences and Technology (ICoFAST 2024).
2 - 3 July, 2024, Mukalla, Hadhramout, Yemen.
- The 5th ICAN Malaysia International Conference on Accounting and Finance (ICAF-IMDS), Stagflation and Digital Transformation: What do they matter for Business Sustainability?
1 - 4 May 2023, The Everly Putrajaya, Malaysia.
- The 4th ICAN Malaysia International Conference on Accounting and Finance (ICAF-IMDS) Building Economic Resilience: Navigating Turbulent Times through Digital Transformation.
21 - 24 March 2022, Adya Hotel, Kuah, Langkawi Island, Malaysia.
- The 3rd ICAN Malaysia International Conference on Accounting and Finance (ICAF-IMDS) Economy and Business Resilience in the Pandemic Era: A Drive for Digital Transformation.
24 - 25 March 2021, Kedah, Malaysia (Virtual Conference)

Invited Speaker & Presenter

STIQ6014 Research Methodology in Computing Course

Topic: Exploring the Adoption and Usage Patterns of Mendeley Reference Manager
Postgraduate - Information Technology
School of Computing (SOC), Universiti Utara Malaysia (UUM) ,
Kedah, Malaysia

STIN5014 Artificial Intelligence Course

Topic: Deep Dive into CNN Architecture and Machine Learning: Processes. Trends and Practical Coding
Postgraduate
Master's and Undergraduate - Information Technology
School of Computing (SOC), Universiti Utara Malaysia (UUM) ,
Kedah, Malaysia

Seminar Talk Series

Topic: Deep Learning and its Application

School of Computing (SOC), Universiti Utara Malaysia (UUM),
Kedah, Malaysia

Masters Project Assessor - Academic Session 2024/2025 & 2025/2026

Topic: Project in Computing

MSc Information Technology, School of Computing (SOC), Universiti Utara Malaysia (UUM),
Kedah, Malaysia

Research Areas & Projects

Multimodal Sentiment Analysis (MSA) using integrated Fuzzy layered Convolutional Neural Network

Accomplishments:

- Developed a TensorFlow-based Fuzzy layered CNN model for MSA, attaining an accuracy rate greater than 90% and a reduction of trainable parameters by 30% with optimized batch processing using the profound sentiment/emotion datasets.
- Enhanced interpretability of the model's predictions by using fuzzy reasoning to explain decisions, particularly in scenarios where sentiment is subjective and complex.

Food Security Analysis Using Convolutional Neural Networks (CNN) for Text Classification

Accomplishments:

- Developed a text classification model using Convolutional Neural Networks (CNN) to analyze and classify text data related to food security
- Enhanced food security insights by analyzing patterns and correlations in the classified data, aiding in decision-making for policy development and emergency response

Image Classification using Convolutional Neural Networks:

Accomplishments:

- Developed a TensorFlow-based CNN model, attaining an 88% accuracy rate in image classification and reducing training time by 15% with optimized batch processing.
- Leveraged a pre-trained LeNet-5 network, achieving image recognition with precision (92%), recall (91%), and an F1-score (93%), assessed via a confusion matrix.

Education

Universiti Utara Malaysia (UUM), Sintok, Kedah, Malaysia.

Doctor of Philosophy (PhD) Computer Science

Covenant University, Ota, Ogun State, Nigeria.

Masters Engineering, Information and Communication Engineering

Olabisi Onabanjo University College of Engineering and Environmental Studies. Ibofun, Ogun State, Nigeria.

Bachelor of Science, Electrical/ Electronics Engineering BSc (Hons) Second Class Upper Division

Petroleum Training Institute, Warri, Delta State, Nigeria

National Diploma, Electrical Electronics Engineering Technology

Certifications

- Deep Learning with Python
- Data Visualization in Tableau
- Data Visualization with Power BI
- Python for Data Analysis
- Certified Scrum Master®
- Big Data and AI

Professional Membership

- The Association for the Advancement of Artificial Intelligence (AAAI)
- International Association of Engineers (IAENG)
- The Council for the Regulation of Engineering in Nigeria (COREN).
- The Nigerian Society of Engineers (NSE)
- Microsoft Internet Security and Acceleration Server 2006, Configuring MICROSOFT
- Executive Member, ICAN Malaysia District Society

Publications

- Onasoga, O. A., Yusoff, N. & Harun, N. H. (2025). Fuzzy-inference-based Multi-modal Processing for Feature and Decision Fusion using 2D CNN, Choquet Integral, and Fuzzy Measure. **Submitted for publication.**
- Onasoga, O. A., Harun, N. H. ., & Yusoff, N. (2024). Fuzzy Convolution Neural Network for Breast Cancer Classification. **Submitted for publication.**
- Onasoga, O. A., Harun, N. H. ., & Yusoff, N. (2023). Fuzzy Layered Convolution Neural Network for Feature Level Fusion Based On Multimodal Sentiment Classification. *Emerging Advances in Integrated Technology*, 3(2), 65–78. Retrieved from <https://publisher.uthm.edu.my/ojs/index.php/emit/article/view/13217>.
- Onasoga, O. A., Yusof, N., & Harun, N. H. (2021). Audio Classification - Feature Dimensional Analysis. *The Importance of New Technologies and Entrepreneurship in Business Development: In The Context of Economic Diversity in Developing Countries*, 775–788. https://doi.org/10.1007/978-3-030-69221-6_59.
- Onasoga O. A., Nooraini Y., (2019). Explainable Deep Learning: Methods and Challenges. *Journal of Advanced Research in Dynamical and Control Systems*, Special Issue 11(8), 1186-1285.
- Ndujiuba, C. U., John, S. N., & Onasoga, K. (2014). Optic Fibericity-The New Era Lighting. *International Journal of Energy Engineering,Scientific & Academic Publishing*, 4(4), 69-74.
- Frank, I., Ike, D., Jimi, A., & Kayode, O. (2013). Multiple-Access Technology of Choice In 3GPP LTE. *International Journal of Computers &Technology*, 6(2), 321–328. <https://doi.org/10.24297/ijct.v6i2.3497>.
- Anthony, A., Onasoga, K., Ike, D., & Ajayi, O. (2013). Web Archiving: Techniques, Challenges, and Solutions. *International Journal ofManagement & Information Technology*, 5(3), 598–603. <https://doi.org/10.24297/ijmit.v5i3.760>

References

References available on request



PUSAT PENGAJIAN PENGKOMPUTERAN
SCHOOL OF COMPUTING
UUM College of Arts and Sciences
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604-928 5056/5058/5060
Faks (Fax): 604-928 5067
Laman Web (Web): www.soc.uum.edu.my

Our Ref. : UUM/CAS/SOC/P-48
Date : 18 February 2025

Dr. Onasoga Olukayode Ayodele
Data Science Research Lab
School of Computing
UUM College of Arts and Sciences

Dear Dr.,

**APPOINTMENT AS INVITED SPEAKER FOR STIQ6014 RESEARCH
METHODOLOGY IN COMPUTING COURSE SEMESTER 242**

I hope this letter finds you well. I am writing on behalf of the School of Computing at UUM to extend an invitation for you to serve as an invited speaker. Details of your speaking engagement are as follows:

Date : 23 February 2025
Time : 10 am – 12 pm
Venue : Webex Online Platform
**Presentation Topics : Exploring the Adoption and Usage Patterns of
Mendeley Reference Manager**

I am confident that your insights and experiences will greatly benefit our MSc Information Technology students. Your presentation will be followed by a Q&A session, allowing for interactive engagement and knowledge exchange. Your participation will undoubtedly enrich our event and contribute significantly to its success.

I am genuinely excited about the prospect of having you as part of our distinguished panel of speakers. Your commitment to excellence and your contributions to the field make you an invaluable addition to our event. Thank you for considering my invitation. I look forward to your positive response and the opportunity to collaborate with you.

Thank you.

"MALAYSIA MADANI"
"SERVING THE NATION"
"KEDAH SEJAHTERA – NIKMAT UNTUK SEMUA"
"KNOWLEDGE, VIRTUE, SERVICE"

Upholding the principles of trust and integrity

PROF. TS. DR. OSMAN GHAZALI
Dean
School of Computing
UUM College of Arts and Sciences

Universiti Pengurusan Terkemuka
The Eminent Management University





PUSAT PENGAJIAN PENGKOMPUTERAN
SCHOOL OF COMPUTING
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604 - 928 5056/5058/5060
Faks (Fax): 604 - 928 5067
Laman Web (Web): www.soc.uum.edu.my

Ruj. Kami : UUM/CAS/SOC/P-48
Tarikh : 6th April 2025

Dr. Onasoga Olukayode Ayodele
Data Science Research Lab
School of Computing

Sir

APPOINTMENT AS EVALUTOR PROJECT IN COMPUTING (STIZ6999) FOR THE SECOND TRIMESTER OF SESSION 2024/2025 (A242)

With due respect, the matter above is referred to.

2. Kindly be informed that sir have been appointed as the Evalutor for the Project in Computing (STIZ6999) for the following student:

Name : Suraya binti Othman
Matric No. : 832206
Tilte : Requirement Model for Evacuation Management System

Name : Al- Shammari Ali Ali Naji
Matric No. : 828772
Tilte : Analysis Operating of Technology Infrastructure Flight Schedule
Updates the Iqari Airline Network of Feature Supporting

Name : Sun, Shiyun
Matric No. : 833288
Tilte : Object Detection for Behavior Analysis in Examination usin Deep Learning

3. Thank you for your contribution and i wish you all the best in carrying out your duties.

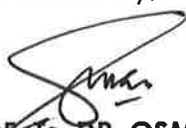
Universiti Pengurusan Terkemuka
The Eminent Management University



Thank You.

"MALAYSIA MADANI"
"SERVING THE NATION"
"KEDAH SEJAHTERA - NIKMAT UNTUK SEMUA"
"KNOWLEDGE, VIRTUE, SERVICE"

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Osman', written over a large, stylized, looped flourish.

PROF. Ts. DR. OSMAN GHAZALI
Dean
School of Computing
UUM College of Arts and Sciences



PUSAT PENGAJIAN PENGKOMPUTERAN
SCHOOL OF COMPUTING
UUM College of Arts and Sciences
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604-928 5056/5058/5060
Faks (Fax): 604-928 5067
Laman Web (Web): www.soc.uum.edu.my

Our Ref. : UUM/CAS/SOC/P-48
Date : 20 October 2024

Dr. Onasoga Olukayode Ayodele
Data Science Research Lab
School of Computing
UUM College of Arts and Sciences

Dear Dr.,

**APPOINTMENT AS INVITED SPEAKER FOR STIN5014 ARTIFICIAL INTELLIGENCE
COURSE SEMESTER 241**

I hope this letter finds you well. I am writing on behalf of the School of Computing at UUM to extend an invitation for you to serve as a distinguished speaker. Details of your speaking engagement are as follows:

Date : 20 October 2024
Time : 8 P.M. - 9.30 P.M.
Venue : Webex Online Platform

Presentation Topics:

A Deep Dive into CNN Architecture and Machine Learning: Processes, Trends, and Practical Coding.

I am confident that your insights and experiences will greatly benefit our MSc Information Technology students. Your presentation will be followed by a Q&A session, allowing for interactive engagement and knowledge exchange. Your participation will undoubtedly enrich our event and contribute significantly to its success.

I am genuinely excited about the prospect of having you as part of our distinguished panel of speakers. Your commitment to excellence and your contributions to the field make you an invaluable addition to our event. Thank you for considering my invitation. I look forward to your positive response and the opportunity to collaborate with you.

"MALAYSIA MADANI"

"SERVICE THE NATION"

"KEDAH SEJAHTERA – NIKMAT UNTUK SEMUA"

"KNOWLEDGE, VIRTUE, SERVICE"

Yours sincerely,

PROF. DR. OSMAN GHAZALI
Dean
School of Computing
UUM College of Arts and Sciences

Universiti Pengurusan Terkemuka
The Eminent Management University





PUSAT PENGAJIAN PENGKOMPUTERAN
SCHOOL OF COMPUTING
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604 - 928 5056/5058/5060
Faks (Fax): 604 - 928 5067
Laman Web (Web): www.soc.uum.edu.my

Our Ref : UUM/CAS/SOC/P-48
Date : 15th December 2024

Dr. Onasoga Olukayode Ayodele
School of Computing
UUM College of Arts & Sciences

Sir,

**APPOINTMENT AS ARTICLE REVIEWER FOR PROJECT IN COMPUTING PROPOSAL (STIZ6999)
FIRST TRIMESTER SESSION 2024/2025 (A241)**

With all due respect the above matter is referred to.

Kindly be informed that sir have been appointed as the Reviewer for the Project in Computing Proposal (STIZ6999) for the following student:

Name : Puven Raj Naidu a/I Pandian
Matric No. : 831787
Title : The role of Artificial Intelligence in Workforce Automation

Thank you for your contribution and I wish you all the best in carrying out your duties.

Thank you.

"MALAYSIA MADANI"
"KEDAH SEJAHTERA – NIKMAT UNTUK SEMUA"
"ILMU BUDI BAKTI"

Upholding the principles of trust and integrity

PROF. DR. OSMAN GHAZALI

Dean
School of Computing
UUM College of Arts and Sciences

Universiti Pengurusan Terkemuka
The Eminent Management University





PUSAT PENGAJIAN PENGKOMPUTERAN
SCHOOL OF COMPUTING
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604 - 928 5056/5058/5060
Faks (Fax): 604 - 928 5067
Laman Web (Web): www.soc.uum.edu.my

Our Ref : UUM/CAS/SOC/P-48
Date : 15th December 2024

Dr. Onasoga Olukayode Ayodele
School of Computing
UUM College of Arts & Sciences

Sir,

**APPOINTMENT AS ARTICLE REVIEWER FOR PROJECT IN COMPUTING PROPOSAL (STIZ6999)
FIRST TRIMESTER SESSION 2024/2025 (A241)**

With all due respect the above matter is referred to.

Kindly be informed that sir have been appointed as the Reviewer for the Project in Computing Proposal (STIZ6999) for the following student:

Name : Eswari a/p Somu
Matric No. : 832067
Title : Effectiveness of Implementing Gamification in Learning/Teaching Programming

Thank you for your contribution and I wish you all the best in carrying out your duties.

Thank you.

"MALAYSIA MADANI"
"KEDAH SEJAHTERA – NIKMAT UNTUK SEMUA"
"ILMU BUDI BAKTI"

Upholding the principles of trust and integrity

PROF. DR. OSMAN GHAZALI
Dean
School of Computing
UUM College of Arts and Sciences

Universiti Pengurusan Terkemuka
The Eminent Management University





PUSAT PENGAJIAN PENGKOMPUTERAN
SCHOOL OF COMPUTING
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604 - 928 5056/5058/5060
Faks (Fax): 604 - 928 5067
Laman Web (Web): www.soc.uum.edu.my

Our Ref : UUM/CAS/SOC/P-48

Date : 15th December 2024

Dr. Onasoga Olukayode Ayodele
School of Computing
UUM College of Arts & Sciences

Sir,

**APPOINTMENT AS ARTICLE REVIEWER FOR PROJECT IN COMPUTING PROPOSAL (STIZ6999)
FIRST TRIMESTER SESSION 2024/2025 (A241)**

With all due respect the above matter is referred to.

Kindly be informed that sir have been appointed as the Reviewer for the Project in Computing Proposal (STIZ6999) for the following student:

Name : Muhammad Naqif bin Md Fared
Matric No. : 832491
Title : Predictive Modeling of Undergraduate Students' ChatGPT Usage in Malaysia

Thank you for your contribution and I wish you all the best in carrying out your duties.

Thank you.

"MALAYSIA MADANI"
"KEDAH SEJAHTERA – NIKMAT UNTUK SEMUA"
"ILMU BUDI BAKTI"

Upholding the principles of trust and integrity

PROF. DR. OSMAN GHAZALI

Dean
School of Computing
UUM College of Arts and Sciences

Universiti Pengurusan Terkemuka
The Eminent Management University





Our Ref : UUM/CAS/SOC/P-48

Date : 15th December 2024

Dr. Onasoga Olukayode Ayodele
School of Computing
UUM College of Arts & Sciences

Sir,

**APPOINTMENT AS ARTICLE REVIEWER FOR PROJECT IN COMPUTING PROPOSAL (STIZ6999)
FIRST TRIMESTER SESSION 2024/2025 (A241)**

With all due respect the above matter is referred to.

Kindly be informed that sir have been appointed as the Reviewer for the Project in Computing Proposal (STIZ6999) for the following student:

Name : Ran, Ziyang
Matric No. : 832494
Title : Deceptive Reviews Detection Based BI-LSTM-CNN With
Attention Mechanism

Thank you for your contribution and I wish you all the best in carrying out your duties.

Thank you.

"MALAYSIA MADANI"
"KEDAH SEJAHTERA – NIKMAT UNTUK SEMUA"
"ILMU BUDI BAKTI"

Upholding the principles of trust and integrity

PROF. DR. OSMAN GHAZALI

Dean
School of Computing
UUM College of Arts and Sciences



PUSAT PENGAJIAN PENGKOMPUTERAN
SCHOOL OF COMPUTING
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604 - 928 5056/5058/5060
Faks (Fax): 604 - 928 5067
Laman Web (Web): www.soc.uum.edu.my

Our Ref : UUM/CAS/SOC/P-48
Date : 15th December 2024

Dr. Onasoga Olukayode Ayodele
School of Computing
UUM College of Arts & Sciences

Sir,

**APPOINTMENT AS ARTICLE REVIEWER FOR PROJECT IN COMPUTING PROPOSAL (STIZ6999)
FIRST TRIMESTER SESSION 2024/2025 (A241)**

With all due respect the above matter is referred to.

Kindly be informed that sir have been appointed as the Reviewer for the Project in Computing Proposal (STIZ6999) for the following student:

Name : Kumaresen a/l Balan
Matric No. : 831786
Title : Optimizing Cybersecurity with AI: Enhancing Threat Detection, Response, and Forensics

Thank you for your contribution and I wish you all the best in carrying out your duties.

Thank you.

"MALAYSIA MADANI"
"KEDAH SEJAHTERA – NIKMAT UNTUK SEMUA"
"ILMU BUDI BAKTI"

Upholding the principles of trust and integrity

PROF. DR. OSMAN GHAZALI
Dean
School of Computing
UUM College of Arts and Sciences

Universiti Pengurusan Terkemuka
The Eminent Management University





Our Ref : UUM/CAS/SOC/P-48
Date : 5th May 2024

Dr. Onasoga Olukayode Ayodele
School of Computing
UUM College of Arts & Sciences

Sir,

APPOINTMENT OF MASTER PROJECT (STIZ6999) PROPOSAL EVALUATOR FOR THE THIRD TRIMESTER (A233) SESSION 2023/2024

The above mentioned matter is referred.

With great pleasure, we are pleased to appoint you as the proposal evaluator for Master's Project (STIZ6999) for the Third Trimester (A233) Session 2023/2024 for the following student:

No	Matric No.	Student Name	Title
1.	828117	Muhammad Ibrahim Khalil	Analysis Of Attacks Towards Intrusion Detection System In Wireless Sensor Networks

This appointment started from 09 May 2024 to 11 September 2024. I would like to thank you for cooperation and contributing we are highly appreciated.

Thank you.

"MALAYSIA MADANI"
"KEDAH SEJAHTERA – NIKMAT UNTUK SEMUA"
"ILMU BUDI BAKTI"

Upholding the principles of trust and integrity

PROF. DR. OSMAN GHAZALI
Dean
School of Computing
UUM College of Arts and Sciences