

Monthly Newsletter

By the AI Research Centre, Woxsen University

Welcome to the **AI Research Centre** at Woxsen University, a leading hub dedicated to pushing the boundaries of artificial intelligence research and innovation. Located within one of India's most dynamic academic ecosystems, the Centre is focused on leveraging AI to create transformative solutions that address real-world challenges and promote societal advancement. Our interdisciplinary team of professors, researchers, executive fellows, and students actively engages in cutting-edge work across areas such as machine learning, natural language processing, computer vision, robotics, blockchain, cybersecurity, and the metaverse. With a clear vision to become a globally recognized centre of excellence, we are committed to fostering ethical AI development, promoting interdisciplinary collaboration, and building impactful partnerships with industry, academia, and government. Through our mission-driven efforts, the AI Research Centre at Woxsen University is shaping the future of technology and empowering the next generation of innovators.



Inauguration of AEGIS – Centre for AI-Enabled Global Infrastructure Security



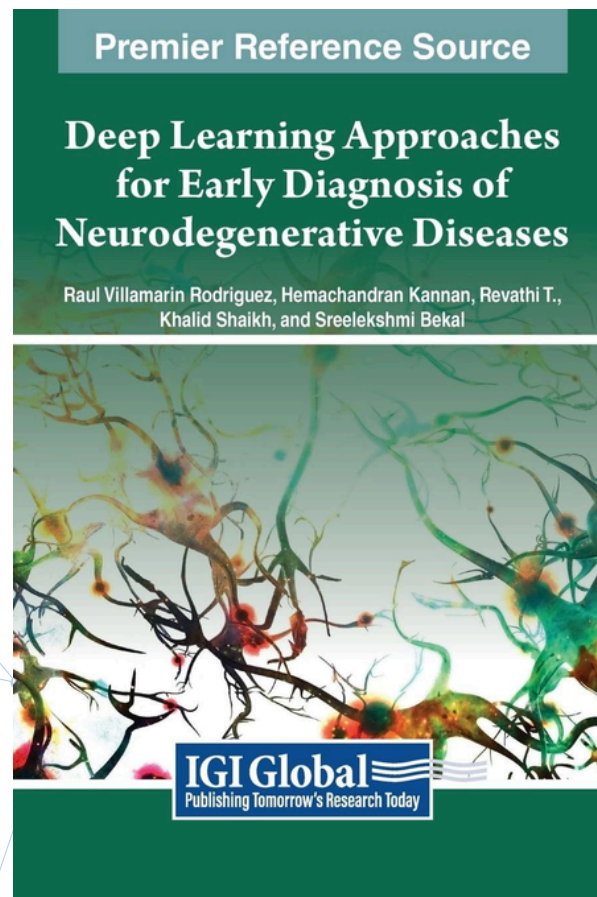
AEGIS-AI Centre for AI-Enabled Global Infrastructure Security

Woxsen University proudly inaugurated **AEGIS**, the Centre for AI-Enabled Global Infrastructure Security, with Shri Jayesh Ranjan IAS, Special Chief Secretary, Chief Minister's Office, Special Projects (SPEED), Investment and Industry Cell, and Special Chief Secretary, Tourism, Culture, Heritage, Youth Advancement & Sports Department, Telangana, presiding over the event.

AEGIS is a groundbreaking initiative focused on AI-driven solutions for global infrastructure security, promoting innovation, collaboration, and impactful research. The centre reinforces Woxsen University's vision to become a hub for advanced research in AI and security.



AI Breakthroughs in Early Detection of Neurodegenerative Diseases



A new book, *Deep Learning Approaches for Early Diagnosis of Neurodegenerative Diseases*, edited by **Raul Villamarin Rodriguez, Dr. Hemachandran K, Revathi T., Khalid Shaikh, and Sreelekshmi Bekal**, explores how artificial intelligence is reshaping healthcare.

The work highlights how deep learning can aid in the early detection of conditions such as Alzheimer's and Parkinson's—two of the most pressing medical challenges today. It emphasizes not only technological innovation but also collaboration between AI researchers, neurologists, and clinicians.

Key themes include advances in neuroimaging, integration of multimodal data, AI-driven diagnostic frameworks, and the ethics of applying AI in healthcare.

Woxsen AI Research Centre Showcases Innovation at INFORMS 2025, Singapore

Woxsen University's AI Research Centre made a global impact at the **INFORMS International Meeting 2025** in Singapore. **Dr. Rajesh Kumar K V**, co-authoring with **Raul Villamarin Rodriguez**, delivered a presentation on: **"Adaptive Decision Intelligence: AI-Powered Robust Optimization for Aviation Systems and Crisis Response."** The talk highlighted how hybrid AI approaches are enabling faster, smarter, and more resilient decision-making in critical environments, from aviation to disaster management.



This pioneering work reflects Woxsen University's commitment to:

1. Addressing real-world challenges with advanced AI .
2. Fostering interdisciplinary collaboration.
3. Promoting responsible, applied AI for global benefit.

Representing Woxsen at such a prestigious international forum underscores the university's mission to drive meaningful innovation at the intersection of technology, society, and impact.

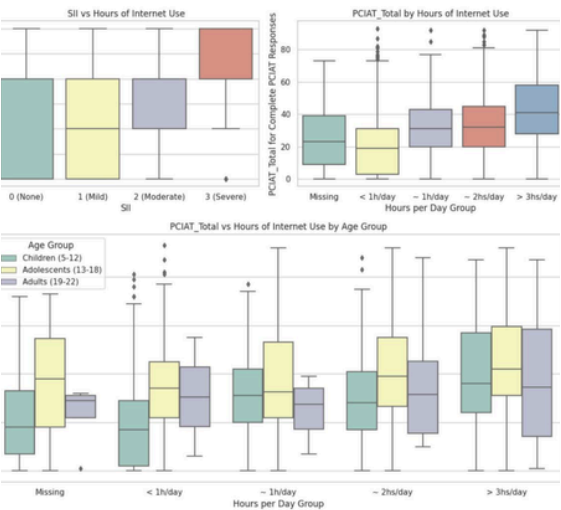
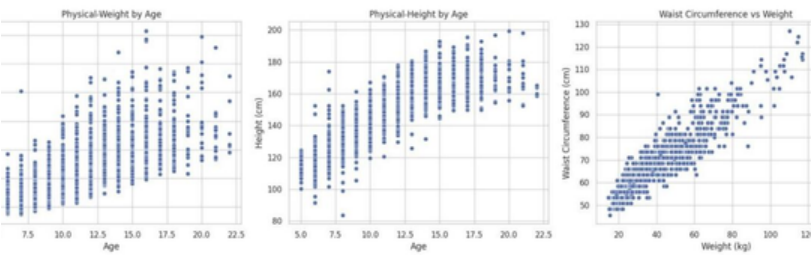
Woxsen MBA Students Pioneer AI-Enabled Agribot for Smarter Farming

Woxsen University proudly announces a remarkable research contribution from its MBA (Business Analytics) students—**Ameera Aafreen Quadeer Khan, Jaya Krishna Sidagam, B. Nikhil Reddy, and Venkat Yellamelli**—under the guidance of **Dr. Rajesh Kumar K V** and **Dr. Hemachandran K.**

Their paper, **“AI-Enabled Agribot for Enhancing Crop Yield and Health Monitoring,”** explores how AI-driven robotics can transform modern agriculture. Key highlights include machine learning integration with field robotics, early disease detection, yield optimization, and automation for efficiency and reduced labor dependency.

Amid climate change, labor shortages, and food security challenges, this research showcases scalable and sustainable AI-powered solutions for the agriculture sector. The work marks a significant step in advancing AgriTech innovation.

Congratulations to the team for shaping the future of smart farming!



Confusion Matrix				
	0	1	2	3
0	1115	381	95	3
1	266	302	155	7
2	68	152	152	6
3	1	4	22	7
Predicted				

Student Innovation at Woxsen University: Metaverse Odyssey (SDG)

Woxsen University proudly presents **Metaverse Odyssey (SDG)**, a student-led initiative from the AI Research Centre that aligns with the United Nations Sustainable Development Goals. The platform combines immersive virtual reality with collaborative learning to pioneer global education.

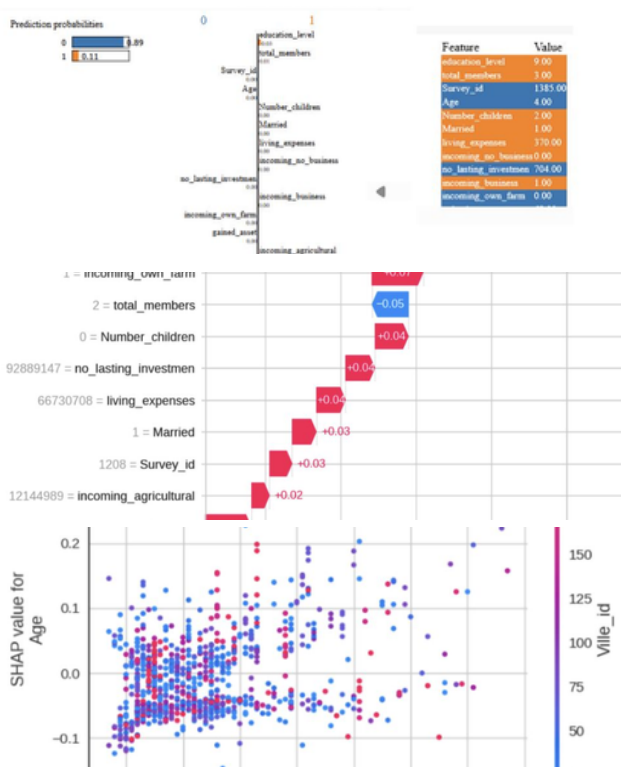
Highlights include:

1. A fully immersive digital twin of Woxsen University
2. VR-enabled classrooms with live sessions
3. Cross-border collaboration and networking
4. Real-world simulations for experiential learning
5. Access via desktop and VR headsets

Metaverse Odyssey (SDG) redefines education by making learning interactive, globally connected, and accessible—preparing students to address global challenges with innovation and empathy.



Woxsen MBA Students Use AI to Predict Student Depression



Woxsen University highlights research by MBA (Business Analytics) students—**Anisha Gupta, Shreyash Kumar, Ojaswa Banerjee, and Abhishek Jha**—guided by **Dr. Rajesh Kumar K V**.

Their study, **“Explainable AI-Driven Approaches for Early Prediction of Depression,”** uses social media patterns to detect early signs of depression among university students, employing ethical AI techniques like SHAP and LIME.

Highlights: 99.73% model accuracy, real-time predictions, anonymized data, and a student-centered approach to digital wellbeing.

The work showcases Woxsen’s commitment to responsible AI for societal impact.

Call for Papers Now Open – AIKP'25: 5th International Conference on Artificial Intelligence and Knowledge Processing



AIKP'25 | 5th International Conference on Artificial Intelligence and Knowledge Processing

Hosting by AI Research Centre – Woxsen University, India

23–25 October 2025 | ENAE International Business School, Spain | Mode: Hybrid

Academic Partners:

- ✓ ENAE International Business School, Spain
- ✓ University of St. Thomas, USA
- ✓ University of Johannesburg, South Africa
- ✓ University of Fujairah, UAE
- ✓ Dar Al-Hekma University, Saudi Arabia
- ✓ Universidad del Rosario

Conference Tracks:

- ✓ Generative AI and Large Language Models
- ✓ Cognitive Computing and Knowledge-Based Systems
- ✓ Ethical AI and Governance Frameworks
- ✓ Applied Machine Learning
- ✓ Multilingual Natural Language Processing
- ✓ Edge AI and Distributed Intelligence

Important Dates:

- ✓ Full Paper Submission: 14th August, 2025
- ✓ Notification of Acceptance: 10th September 2025
- ✓ Camera-Ready Submission: 18th September, 2025
- ✓ Registration Deadline: 20th September, 2025

Scan Here for Paper Submission

Conference Website: <https://aikip25.aicrwou.in>

Scopus Indexed Conference

Supported by:

- ✓ Emerging Technologies Wing, Government of Telangana
- ✓ Department of IT, Government of Tamil Nadu

ENAE | UNIVERSITY OF St. Thomas | UNIVERSITY OF JOHANNESBURG | UNIVERSITY OF FUJAIRAH | DAR AL-HEKMA UNIVERSITY | UNIVERSIDAD DEL ROSARIO | Springer

The AI Research Centre at Woxsen University, in collaboration with ENAE Business School, Spain, invites researchers, academicians, and industry experts worldwide to submit their original research, white papers, and case studies to AIKP'25.

Be a part of a transformative platform that drives AI for global impact through interdisciplinary collaboration, academic excellence, and thought leadership

Harnessing Blockchain, Digital Twin Fusion for Sustainable Investments

Climate change is no longer a distant risk it is the defining challenge of our time. Rising global temperatures, catastrophic natural events, and unprecedented ecological shifts demand not just awareness but action.

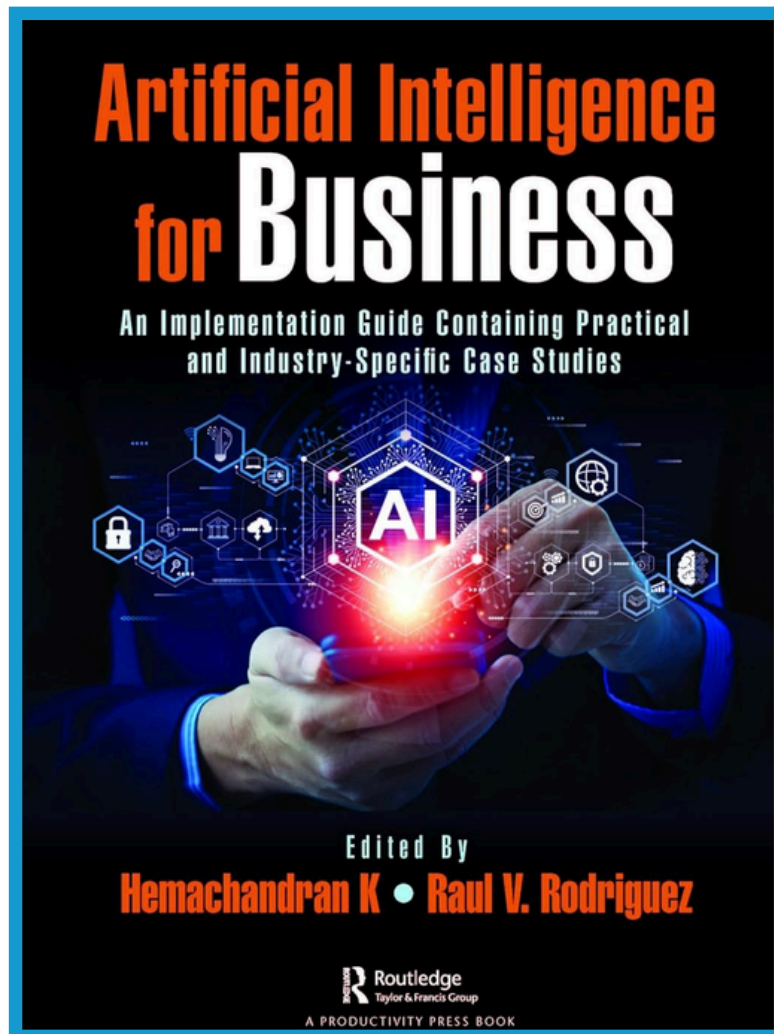
Finance is at the center of this transformation. From clean energy projects to ESG-linked funds, financial markets worldwide are evolving to fuel sustainable development and align with the UN SDGs. But to truly accelerate this shift, technology must play a catalytic role.

Premier Reference Source

Harnessing Blockchain-Digital Twin Fusion for Sustainable Investments

Syed Hasan Jafar, Raul Villamarin Rodriguez, Hemachandran Kannan, Shakeb Akhtar, and Philipp Plugmann

New Book Explores AI's Impact on Business and Ethics



Woxsen University announces the publication of “Artificial Intelligence in Business: Industry Applications & Ethical Considerations,” edited by Dr. Hemachandran K and Raul Villamarin Rodriguez. The book examines how AI is reshaping industries—not just boosting performance but redefining workplace culture, decision-making, and customer engagement.

Unlike typical success-story compilations, this work delves into AI's role across HR, law, finance, healthcare, agriculture, education, and public safety, while addressing the ethical responsibilities that accompany technological advancement. Each chapter blends practical applications with critical reflection, inviting professionals, researchers, and policymakers to consider not only what AI can do, but what it should do.

For anyone navigating organizational transformation or scaling AI responsibly, this book offers a guide to leading with intelligence and ethics.

Weekly Project Discussion Series

At Woxsen's AI Research Centre, innovation never sleeps. To foster collaboration, knowledge sharing, and impactful research, we are starting a Weekly Project Discussion Series.

Faculty, researchers, and students will come together to present, discuss, and refine the ongoing AI projects across diverse domains such as:

- Business Analytics
- Finance & Risk Modeling
- Healthcare & Life Sciences
- Marketing & Consumer Insights
- Emerging AI Applications

These weekly discussions aim to:

- ◆ Encourage cross-disciplinary collaboration
- ◆ Sharpen research ideas through feedback
- ◆ Inspire innovative solutions to real-world challenges

This initiative reflects Woxsen University's commitment to building a thriving AI-led ecosystem of research and innovation.

Our Vision

To become a globally recognized hub for pioneering AI research and innovation, driving transformative solutions that address real-world challenges and contribute to societal welfare.

Our Mission

To advance the field of artificial intelligence through cutting-edge research, interdisciplinary collaboration, and ethical development, fostering an environment that attracts top talent and cultivates partnerships with industry, academia, and government.




Global Footprint



About Us

Welcome to the AI Research Centre at Woxsen University, a renowned hub committed to pushing the boundaries of AI research and development. Situated in a vibrant academic setting, our facility is dedicated harnessing the revolutionary power of AI technologies to transform industries and improve social well-being. Our AI Research Centre boasts a team of professors, researchers, Executive Fellows, and students who are deeply involved in cutting-edge areas such as Machine Learning, Natural Language Processing, Computer Vision, Robotics, Blockchain, Cybersecurity, and the Metaverse. Our aim is to create innovative AI solutions that address practical issues, promoting advancement across various industries.

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AI RESEARCH CENTRE

Our Projects

- Student Skill Enhancement (Meta + Gen AI) Game
- Metaverse Odyssey (SDG) VR
- Transcripts Verification System using Blockchain
- Woxsen Campus Mart
- Woxsen Campus Tour VR
- Mobile Bargaining System Using AI in Metaverse
- Iron Man Suit for Fire Detection
- Blockchain Stock Exchange
- Necrobotics
- Real time weather monitoring
- Healthcare management system

TRY DEMO



Core Pillars

- Research and Development Division
- Product Development Division
- Technical Documentation / Research Publication Division

Strategic Partners



Our Niche

- ✓ Artificial Intelligence and Machine Learning
- ✓ Robotics, Necrobotics
- ✓ IoT and Embedded Systems
- ✓ Virtual and Augmented Reality - Metaverse
- ✓ Software and Web Development
- ✓ Quantum Computing
- ✓ Natural Language Processing / LLM Models
- ✓ Biomedical Signal Processing
- ✓ Human Computer Interaction
- ✓ Blockchain and Web3
- ✓ Geospatial Information