List of Publications

Peer-Reviewed Journal Articles

1. **Lan, R.,** Awolusi, I., and Cai, J. (2024). "Computer Vision for Safety Management in the Steel Industry." *AI*, 5(3), 1192-1215.
2. **Lan, R.,** Awolusi, I., and Cai, J. (2023). "Digital Computer Vision Technologies for Safety Management Applications in the Steel Manufacturing Industry." *Digital Transformations, Iron & Steel Technology.*
3. **Lan. R.,** Adenuga, O., and Awolusi, I. (2025). "Professionals' Perspectives on the Factors Causing Construction Project Failures in Developing Countries: A Case Study of Lagos Metropolis." *International Journal of Construction Management (IJCM).*
4. **Lan. R.,** Adenuga, O., and Awolusi, I. (2025). "Impact of Construction Project Failure on Key Project Stakeholders: Assessing the Perspectives of Professionals in Lagos Metropolis." *Construction, Economics, and Building.*

Journal Articles Under Review

5. **Lan, R**. and Awolusi, I. (2025). "The Elevated Construction Ergonomic Risk Index (ECERI): Contextualizing REBA for Height-Exposed Tasks" *Journal of Safety Research.*
6. **Lan, R**. and Awolusi, I. (2025). "Self-Organizing Fuzzy Inference for Uncertainty-Aware Ergonomic Risk Assessment." *Engineering Application of Artificial Intelligence.*
7. Esfahani, M., **Lan, R**., Awolusi, I., Taah, S., (2026). "Physiological Effects of Structured Heat Stress Prevention Interventions in Construction Workers Using Wearable Technology." *Building and Environment.*
8. **Lan, R**., Oyeyipo, T., Langar, S., and Awolusi, I. (2025). "BIM and Digital Twin for Construction Safety: A Review." *Automation in Construction.*

Peer-Reviewed Conference Articles

9. **Lan, R.** and Awolusi, I., (2024). Integrating Wearable Sensing Devices and Computer Vision for Safety Management in Steel Mills. *Proc. Iron & Steel Technol. Conf.* 2024. **(AIST Certificate of Recognition)**
10. **Lan, R.,** Awolusi, I., and Cai, J. (2023). Computer Vision for Pipeline Monitoring Using UAVs and Deep Learning. *Pipelines* 2023, 181-191.
11. **Lan, R.,** Awolusi, I., and Cai, J. (2023). Digital computer vision for safety management in Steel manufacturing. Proc. Iron & Steel Technol. Conf. 2023, 31-42 **(AIST Certificate of Recognition)**
12. **Lan, R.** and Sulbaran, T. (2023). A Review of Computer Vision-Based Progress Monitoring for Effective Decision Making. *Proc. of the 23rd Intl. Conf. on Constr. App. of VR*, 856–864**.**
13. **Lan, R**., Awolusi, I. (2025). "UAV-DL-Based Computer Vision Framework for Construction Worker Pose Estimation." CIB World Building Congress, WBC2025 In *CIB Conferences* (Vol. 1, No. 1, p. 244). **(Awarded Best Paper at CIBWBC 2025 International Conference)**
14. Okonkwo, C., **Lan R.,** Awolusi, I., Cai, J. (2025) "Integrating Artificial Intelligence Knowledge into Construction Education: A Case Study Application for Predicting Concrete Properties" *American Society for Engineering Education (ASEE) Gulf Southwest Conference.*
15. **Lan R.,** Okonkwo, C., Awolusi, I., Cai, J. (2025) "Incorporating Sustainability Knowledge into Construction Education Curriculum: A Case Study of Earthen Masonry" *American Society for Engineering Education (ASEE) Gulf Southwest Conference.*

16. Esfahani, M., **Lan, R**., and Awolusi, I. (2025). "Worker Perception and Physiological Responses to Heat Stress Prevention and Control Interventions in Construction" *ASCE International Conference on Computing in Civil Engineering.*

Conference Paper Under Review

5. **Lan, R**. and Awolusi, I. (2026). "Contextual Ergonomic Risk Amplification (CERA) Framework: A Novel Approach for Height-Exposed Construction Tasks" *Construction Research Congress*
6. **Lan, R**. and Awolusi, I. (2026). Weather-Integrated Computer Vision Framework for Real-Time Construction Safety Risk Assessment. *Construction Research Congress*
7. Esfahani, M., **Lan, R**., Awolusi, I., Taah, S., (2026). "Enhancing Real-Time Decision Making for Heat Stress Prevention in Construction using Wearable Sensing Devices." *Construction Research Congress*
8. Oyeyipo, T., **Lan, R.,** Awolusi, I., Schultz, A., Laefer, L., Al-Sabah, S. (2026). Pose Estimation for Ergonomic Risk Assessment in Steel Connection Tasks. *Construction Research Congress*
9. Falomo, O., **Lan, R**., Awolusi, I., Schultz, A., Cai, J., Du, A. (2026). Framework for Managing and Sharing UAS-Acquired Data in Transportation Infrastructure Monitoring. *Construction Research Congress.*

Manuscript in Progress

1. **Lan, R**. and Awolusi, I. (2025). "Computer Vision Adoption and Implementation for Safety and Health in the Construction Industry." *Technology in Society.*
2. **Lan, R.** and Awolusi, I. (2025). **"**UAV Path Optimization for Maximum Safety Coverage". *Automation in Construction.*
3. **Lan, R**. and Awolusi, I. (2025). "Worker Protection or Worker Surveillance? The Privacy-Performance Paradox in Construction Safety." *International Journal of Information Management*
4. **Lan, R**. and Awolusi, I. (2025). "Strategic Pathways: Mapping the Future Evolution and Implementation of Computer Vision in Construction Safety." *Journal of Strategic Information Systems.*