AARI
Asian Academic Research Institute

PROCEEDING BOOK

2026 International Conference on Innovative Strategies in Social Sciences, Management, Engineering, and Medical Research (ISMEM)

Osaka Japan

Volume 03
Issue 01

www.asianresearchinstitute.com

Contents

Book of Abstracts Proceedings

2026 International Conference on Innovative Strategies in Social Sciences, Management, Engineering, and Medical Research (ISMEM)

City/Country: Osaka Japan/ Online
Date: May 30-31, 2026
Venue: RIHGA Royal Hotel Osaka

Email: contact@asianresearchinstitute.com
URL: https://asianresearchinstitute.com/

AARI
Asian Academic Research Institute

Proceedings of the 2026 International Conference on Innovative Strategies in Social Sciences, Management, Engineering, and Medical Research (ISMEM)

Disclaimer

Authors have ensured sincerely that all the information given in this book is accurate, true, comprehensive, and correct right from the time it has been brought in writing. However, the publishers, the editors, and the authors are not to be held responsible for any kind of omission or error that might appear later on, or for any injury, dam- age, loss, or financial concerns that might arise as consequences of using the book. The views of the contributors stated might serve a different perspective than that of the AARI.

AARI
Asian Academic Research Institute

REVIEW BOARD

ORGANIZING COMMITTEE

Dr. Sennay Ghebreab
Conference Secretariat

Andrew Wee
Conference Coordinator

Mr. John
Conference Coordinator

Ms. Adrina
Conference Coordinator

Mr. Anthony
Conference Coordinator

Mr. Ivan
Conference Coordinator

CONFERENCE TRACKS

- Society For Business, Economics, Social Science & Humanities
- Society For Engineering & Technology, Computer, Basic & Applied Sciences
- Society For Medical, Medicine and Health Sciences

CONFERENCE CHAIR MESSAGE

Dr. Sennay Ghebreab

"Asian Academic Research Institute" is a platform that thrives to support the worldwide scholarly community to analyze the role played by the multidisciplinary innovations for the betterment of human societies. It also encourages academicians, practitioners, scientists, and scholars from various disciplines to come together and share their ideas about how they can make all the disciplines interact in an innovative way and to sort out the way to minimize the effect of challenges faced by the society. All the research work presented in this conference is truly exceptional, promising, and effective. These researches are designed to target the challenges that are faced by various sub-domains of the Society For Business, Economics, Social Science & Humanities, Society For Engineering & Technology, Computer, Basic & Applied Sciences, Medical, Medicine & Health Sciences.

I would like to thank our honorable scientific and review committee for giving their precious time to the review process covering the papers presented in this conference. I am also highly obliged to the participants for being a part of our efforts to promote knowledge sharing and learning. We as scholars make an integral part of the leading educated class of the society that is responsible for benefitting the society with their knowledge. Let's get over all sorts of discrimination and take a look at the wider picture. Let's work together for the welfare of humanity for making the world a harmonious place to live and making it flourish in every aspect. Stay blessed.

Thank you.

Dr. Sennay Ghebreab
Conference Secretariat

TRACK A

MULTIDISCIPLINARY STUDIES

A PROTOTYPE LEVEL EDITOR SYSTEM FOR GAME PLANNING DESIGN AND IMPLEMENTATION

Shih Chieh, Liao[1], Rou Hua, Zeng[2]*

[12]Southern Taiwan University of Science and Technology, Tainan, Taiwan
Corresponding Author Email: grace12918@gmail.com

This study presents the design and implementation of a prototype level editor system developed to support game planning processes. Traditional lecture-based instruction in game planning often lacks hands-on practice, making it difficult for students to effectively translate design concepts into tangible prototypes. Grounded in experiential learning theory and Kolb's experiential learning cycle, this study considers game level design to be an iterative learning process involving continuous experimentation, testing, and refinement. However, without appropriate tool support, students often struggle to transform abstract design concepts into tangible and testable out comes. The proposed level editor is a prototype system specifically designed for instructional purposes and developed using Unity. It supports 2D level configuration and fundamental game element arrangement, including scene construction, character and enemy placement, and real-time simulation testing. Featuring a visual drag-and-drop interface, the system allows users to construct playable level prototypes without requiring programming knowledge, thereby lowering technical barriers and enabling students to focus on gameplay mechanics and level pacing. The integration of immediate testing and iterative modification mechanisms further aligns the design process with experiential learning principles. This paper focuses on the design rationale, system architecture, and development process of the level editor, and discusses its integration model within game planning courses. The study contributes a pedagogically oriented level editor framework that may be extended to broader applications in game design education, creative training, and interdisciplinary practice-based courses.

Keywords: Level editor, Game level design, Game planning

EFFECTS OF ENEMY VISUAL AND BEHAVIOR CONSISTENCY ON PLAYERS EXPECTED EXPERIENCE IN HIGH-TENSION LEVELS: A SCENARIO-BASED PILOT STUDY

Shih Chieh, Liao[1*], Peng Xu, Pan[2]

[12]The Department of Multimedia and Entertainment Science, Southern Taiwan University of Science and Technology, Tainan, Taiwan
Corresponding Author Email: alfietw@stust.edu.tw

In high-tension action levels, players rely on enemy visual cues to anticipate threats, yet designers sometimes deliberately mismatch cues and attack behaviors to create surprise. This pilot study examines how the consistency between enemy visual cues—body silhouette, implied movement speed, and attack wind-up cues—and actual attack behavior influences players expected gameplay experience, and proposes a low-cost, scenario-based screening method for early development. Eight stimulus sets were created by pairing static enemy visuals with a high-tension level vignette, including four high-consistency and four low-consistency designs, and their manipulations were validated by expert review. Fifteen players with experience in side-scrolling action games rated expected fluency, challenge, tension, and overall experience on a seven-point scale after viewing each stimulus. Results indicate that higher consistency is positively associated with expected fluency and overall experience, whereas low-consistency contrast designs significantly increase expected tension. Exploratory analyses suggest that low-skill players tend to interpret contrast designs as stressful and rate overall experience lower, while higher-skill players accept reduced expected fluency but report higher expected challenge. These findings suggest that scenario-based screening can help designers balance readability and surprise when prioritizing enemy concepts, and motivate future validation with playable prototypes to examine gaps between expected and actual experience.

Keywords: Expected player experience, Enemy design, Visual-behavior Consistency, High-tension levels, Scenario-based evaluation

A NOVEL MODIFIED CARDIOVASCULAR STENT COMBINING OXYGENATED DIAMOND DOT ARRAY AND TOPOGRAPHIC CONTROL FOR ENHANCED BIOCOMPATIBILITY

Ching-Jui Shih[1]*, Yu-Sheng Hsu[2], Po-Wei Huang[3], Yung-Chang Lin[4]

[1234]Department of Mechanical and Automation Engineering, Taiwan Steel University of Science and Technology College of Engineering, Kaohsiung 821013, Taiwan
Corresponding Author Email: t4959@mail.nknu.edu.tw

Coronary Heart Disease (CHD) remains a critical health challenge, often requiring percutaneous coronary intervention (PCI) with stents. However, conventional stents face risks of restenosis and thrombosis due to suboptimal cellsurface interactions. This paper proposes a modified cardiovascular stent featuring a polar-terminated (oxygenated) diamond dot array. By integrating microfabrication (MEMS) and surface modification, we precisely control surface topography to recruit endothelial cells and promote pro-healing. This interdisciplinary approach aims to bridge the gap between industrial micro-manufacturing and clinical biomaterial applications.

Keywords: Cardiovascular Stent, Biocompatibility, Biomedical engineering, Stent modification

FUSION INTELLIGENCE FOR ANEMIA DIAGNOSIS: MULTIMODAL AI APPROACHES FOR EARLY DETECTION AND INTEGRATED MANAGEMENT

Rujal Raj Singh[1], Raj Kishore Singh[2], Aditya Kumar[3], Aradhana Singh[4], J P Pandey[5], Abhinav K. Gautam[6]

[12345]Abdul Kalam Technical University
Corresponding Author Email: rujalrajcs@gmail.com

Anemia continues to be one of the most pervasive global health challenges, affecting nearly one-fourth of the world's population. Despite remarkable advances in hematology, conventional diagnostic approaches based solely on hemoglobin levels and red cell indices often fail to reveal complex or overlapping etiologies. The integration of artificial intelligence (AI) with multimodal data fusion marks a paradigm shifts in precision hematology. This chapter explores the emergence of fusion intelligence consolidating hematological, biochemical, imaging, genomic, and clinical data to enhance the accuracy of anemia diagnosis and management. Emphasis is placed on clinical applications, ethical considerations, and translational challenges. By unifying diverse large data sources into an explainable and equitable AI ecosystem, fusion intelligence redefines anemia care from reactive correction to proactive prevention, laying the foundation for patient-centered, data-driven hematology.

Keywords: Anemia, Hematology, Iron deficiency anemia, Fusion intelligence, Multimodal AI, Explainable AI, Convolutional neural network, Internet of medical Things

AARI
Asian Academic Research Institute

The Asian Academic Research Institue Strengthening Purposeful Networks Encourging Creative Partnerships and Forging a Brighter Tomorrow.

AARI
Asian Academic Research Institute

www.asianresearchinstitute.com