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PREFACE

Architecture is entering a critical phase where artificial intelligence is no longer positioned merely as a design aid, but as an active mediator between human experience, environmental performance, and the built environment. As computational tools grow more sophisticated, architectural discourse is increasingly oriented toward questions of comfort, cognition, behavior, and adaptability; placing human well-being at the core of technological advancement.

In this ninth issue of **JARINA (Journal of Artificial Intelligence in Architecture) Volume 5, No. 1 (2026)**, themed “*Artificial Intelligence for Human-Centric Performance: Integrating Neuroarchitecture, Environmental Analytics, and Adaptive Built Environments*” we present five scholarly contributions that reflect this interdisciplinary and human-centered trajectory.

The issue opens with a structured theoretical review on **measuring brain comfort in neuroarchitectural research**, bridging architecture and medical sciences to clarify how neurological and cognitive responses can inform spatial design. This is followed by a **systematic review examining the impacts of artificial intelligence on urban planning**, highlighting how AI-driven tools are reshaping analytical frameworks and decision-making processes at the city scale. At the community and spatial configuration level, a study on **connectivity in the Dinoyo Ceramic Tourism Kampong** employs space syntax analysis to demonstrate how spatial relationships influence movement patterns, social interaction, and local economic resilience. Addressing environmental performance and microclimatic adaptation, another contribution explores **the role of retention ponds in shaping thermal comfort and ventilation effects** within a university campus context, emphasizing the integration of landscape elements and environmental analytics in enhancing human comfort. The issue concludes with an **operational energy assessment and selective retrofit strategy for a 24-hour café**, illustrating how AI-assisted, performance-based analysis can guide adaptive interventions toward improved energy efficiency and sustainable building operation.

Collectively, these papers underscore a shared premise: artificial intelligence attains its greatest relevance when aligned with human perception, environmental responsiveness, and contextual sensitivity. Rather than replacing architectural judgment, AI functions here as an analytical extension for supporting more informed, responsible, and human-centered design decisions.

We extend our sincere appreciation to the authors, reviewers, and editorial team whose dedication and scholarly rigor made this issue possible. We hope this volume will stimulate further interdisciplinary dialogue and inspire future research that advances architecture as a discipline grounded in both technological innovation and human experience.

Khaerunnisa
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