

## In the spotlight

### Adaptability of buildings: a systematic review of current research

*Frontiers in Built Environment*

SUTD Authors: Doreen Steven Mlote, Michael Budig

In today's rapidly changing world, cities are constantly evolving. Buildings that once served a purpose can quickly become outdated and insufficient to meet the needs of tomorrow. This highlights the significance of adaptability in the way we build and respond to unprecedented urban growth, climate change, and technological advancements. Traditional static building designs make structures vulnerable to premature obsolescence and make cities vulnerable to resource depletion in the future. This paper draws attention to Adaptable Building Strategies that allow buildings to accommodate change in function without major renovations or demolition, significantly extending their lifespan through repurposing and reusability of the whole building or its components. The review addresses drivers, benefits, and key challenges such as demographic shifts, environmental concerns, and technological progress. Emphasis remains on the need for a comprehensive framework that guides engineers and architects in the creation of adaptable designs that can thrive in the face of change.



*"This paper draws attention to Adaptable Building Strategies that allow buildings to accommodate change in function without major renovations or demolition, significantly extending their lifespan through repurposing and reusability of the whole building or its components."*

- Doreen Steven Mlote

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## TRAILBLAZERS



### Playing for keeps: Digital labor and blockchain precarity in play-to-earn gaming

*Geoforum*

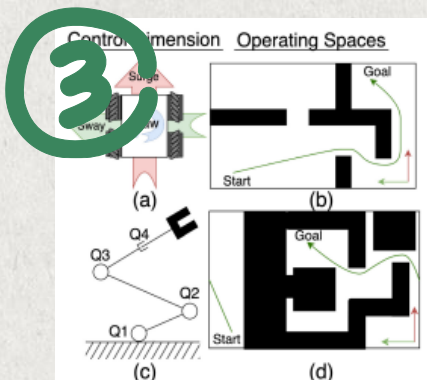
SUTD Authors: Gordon Tan Kuo Siang  
*Humanities, Arts and Social Sciences (HASS)*



### Text-to-Audio Generation using Instruction-Guided Latent Diffusion Model

*MM '23: Proceedings of the 31st ACM International Conference on Multimedia*

SUTD Author: Deepanway Ghosal, Navonil Majumder, Ambuj Mehrih, Soujanya Poria  
*DeCLaRe Lab*



### Enabling Framework for Constant Complexity Model in Autonomous Inter-Reconfigurable Robots

*IEEE Transactions On Automation Science And Engineering*

SUTD Authors: Ash Wan Yaw Sang, Moo Chee Gen, Vinu Sivanantham, Mohan Rajesh Elara  
*ROAR Lab, EPD*



### From walking to staying: The impact of spatial qualities on socio-spatial segregation in innovation districts

*Sustainable Cities And Society*

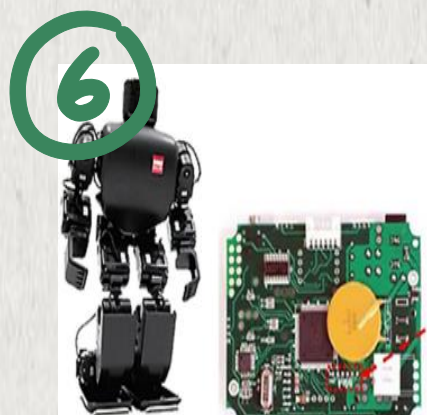
SUTD Authors: Tongchaoran Gao, Daniel Wong Kin Heng, Thomas Schroeppfer  
*Architecture and Sustainable Design (ASD)*



### Mapping Novice Designer Behavior to Design Fixation in the Early-Stage Design Process

*Journal Of Mechanical Design*

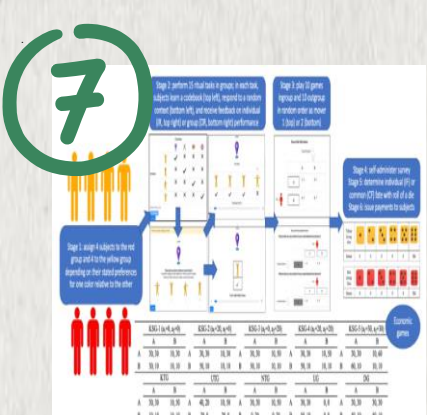
SUTD Author: Shuo Jiang  
*Data-Driven Innovation Lab*



### A Novel Implementation of a Social Robot for Sustainable Human Engagement in Homecare Services for Ageing Populations

*Sensors*

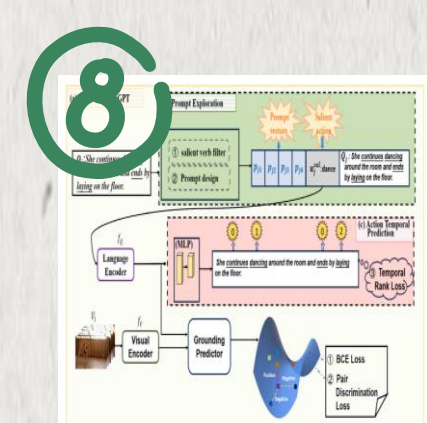
SUTD Authors: Teo Tee Hui  
*Engineering Product Development (EPD)*



### Perfect conformity to observable minimal rituals engenders trust: An experimental test of the signaling hypothesis

*Applied Psychology-An International Review-Psychologie Appliquee-Revue Internationale*

SUTD Authors: Dinithi N. Jayasekara  
*Lee Kuan Yew Centre for Innovative Cities*



### Action-guided prompt tuning for video grounding

*Information Fusion*

SUTD Authors: Soujanya Poria  
*Information Systems Technology and Design (ISTD)*