



Document details

< Back to results | 1 of 1

📄 Export 📄 Download 🖨️ Print ✉️ E-mail 📄 Save to PDF ☆ Add to List More... >

View at Publisher

Planning Malaysia
Volume 18, Issue 2, 2020, Pages 73-84

A generic process of documentation and data management for historical Malay architecture using bim (Article) (Open Access)

Mustafa, M.H.^a ✉️, Ali, M.^b, Hashim, K.S.H.^a, Suhaimi, M.S.M.^a 👤

^aKuliyah of Architecture and Environmental Design, International Islamic University Malaysia, Malaysia

^bKuliyah of Engineering, INTERNATIONAL ISLAMIC UNIVERSITY Malaysia, Malaysia

Abstract

View references (22)

Historical Malay Building Information Modelling (HMBIM) is a prototype library of historical Malay BIM objects, which are developed based on historical study on the architecture of Malay heritage. The objective of this paper is to outline a generic process of documentation and data management (data collection, modelling and retrieval using BIM), specific for the preservation and conservation effort of Malay architecture. This research employs multiple case studies technique and the process begins with the collection of data using multiple reliable sources namely archival reports, measured drawings and scan-to-BIM. HMBIM is enriched using reverse engineering approach where the information about building components are semantically identified according to Malay architecture characteristics and enriched into data coding system. Since there is no standard approach for conservators in the work of conservation, assembly and disassembly of Malay buildings in Malaysia, HMBIM is anticipated to be able to suggest 'standard' for the work. The main output for this paper is the creation of framework in demonstrating the processes involved. © 2020 Malaysian Institute Of Planners. All rights reserved.

SciVal Topic Prominence ⓘ

Topic: Architectural Heritage | Photogrammetry | Information Modeling

Prominence percentile: 99.008 ⓘ

Author keywords

BIM BIM library Data management HBIM Malay architecture

ISSN: 16756215
Source Type: Journal
Original language: English

DOI: 10.21837/pm.v18i12.744
Document Type: Article
Publisher: Malaysian Institute Of Planners

References (22)

View in search results format >

☐ All Export 🖨️ Print ✉️ E-mail 📄 Save to PDF Create bibliography

Metrics ⓘ View all metrics >



PlumX Metrics ▾

Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert >

Set citation feed >

Related documents

Historic building information modelling (HBIM) for Malaysian construction industry

Ali, M. , Ismail, K.M. , Hashim, K.S.H.-Y. (2018) *Planning Malaysia*

LOG HOUSES in les LAURENTIDES. from ORAL TRADITION to AN INTEGRATED DIGITAL DOCUMENTATION BASED on the RE-DISCOVERY of the TRADITIONAL CONSTRUCTIVE-GEOGRAPHICAL €RPERTOIRES' THROUGH DIGITAL BIM DATA ARCHIVE

Esponda, M. , Piraino, F. , Stanga, C. (2017) *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*

HBIM and virtual tools: A new chance to preserve architectural heritage

Osello, A. , Lucibello, G. , Morgagni, F. (2018) *Buildings*

View all related documents based on references

□ 1 Abidin W.B.b., W.
(1981) *The Malay House: Rationale and Change*. Cited 3 times.
(Master Thesis) M.I.T., Massachusetts. Cambridge

Find more related documents in
Scopus based on:

Authors > Keywords >

□ 2 Ab Rashid, N.S., Daud, N.I.M.K.
The suitability of adaptive reuse practices on historic residential buildings to national memorials
(2014) *Journal of Design and Built Environment*, 14, pp. 1-13.
June

□ 3 Ali, M., Ismail, K.M., Has-Yun, K.S., Suhaimi, S., Mustafa, M.H.
Heritage building preservation through building information modelling: Reviving cultural values through level of development exploration
(2018) *Journal of the Malaysian Institute of Planners*, 1 (2), pp. 62-72.

□ 4 Núñez Andrés, A., Buill Pozuelo, F., Regot Marimón, J., de Mesa Gisbert, A.
Generation of virtual models of cultural heritage

(2012) *Journal of Cultural Heritage*, 13 (1), pp. 103-106. Cited 40 times.
<http://www.elsevier.com.ezproxy.um.edu.my>
doi: 10.1016/j.culher.2011.06.004

View at Publisher

□ 5 Baik, A., Boehm, J., Robson, S.
Jeddah historical building information modeling "JHBIM" Old Jeddah - Saudi Arabia

(2013) *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 40 (5W2), pp. 73-78. Cited 22 times.
<http://www.isprs.org/proceedings/XXXVIII/4-W15/>

□ 6 Barazzetti, L., Banfi, F., Brumana, R., Previtali, M.
Creation of Parametric BIM Objects from Point Clouds Using Nurbs

(2015) *Photogrammetric Record*, 30 (152), pp. 339-362. Cited 53 times.
<http://www.blackwellpublishing.com/journals/PhotRec>
doi: 10.1111/phor.12122

View at Publisher

□ 7 (2017) *Malaysia Building Information Modelling Report 2016*. Cited 4 times.
CIDB.

□ 8 De Luca, L.
3D modelling and semantic enrichment in cultural heritage
(2013) *Photogrammetric Week 2013*, pp. 323-333. Cited 6 times.
