

第 24 屆營建工程與管理學術研討會 議程

地點:臺灣科技大學國際大樓 (IB)

8:40	報到 Registration									
9:00	(國際大樓 1F 入口報到處)									
9:00	A1 開幕準備	幕準備 規劃設 與專案管		C1 物業管		永續	D1 營建與 週期管理	資訊	E1 科技應用	F1 防救災 與風險管理
10:20	(IB-101)	(IB-201	.)	(IB-202)		l (IB-301)		(IB-302)		(IB-409-1)
10:40 10:50	開幕典禮、主辦單位致詞 Opening Session(IB-101)									
10:50 11:30	特邀專題演講 Keynote Address (IB-101) 演講嘉賓:台灣世曦工程顧問股份有限公司 李順敏總經理 演講嘉賓:行政院公共工程委員會技術處 林傑處長									
11:30 13:30	中場休息 Lunch									
13:30 15:00	A2 營建材料 與品質管制 (IB-101)	與專案管理		C2 D 程規劃 永續營 與排程 生命週 IB-202) (IB-3		期管理 II			F2 營建法規 與爭議處理 (IB-409-1)	G1 工程採購 與民間參與 (IB-409-2)
15:00 15:20	茶敘時間 Coffee Break									
15:20 16:50	A3 閉幕準備		規劃設計 與專案管理		C3 營建財務 與經濟		D3 資訊科技應用 III		E3 科技應用 IV	F3 其他
17:00 17:40	(IB-101) (IB-201) (IB-202) (IB-301) (IB-302) (IB-409-1) 閉幕典禮及頒獎 Closing Session & Awards Ceremony (IB-101)									



口頭發表詳細議程 Technical Program

A2 營建材料與品質管制 Construction Materials and Quality Control

評審委員: 王裕仁、王翰翔

- 使用現代富勒理想級配曲線及膠結材料模擬逼近古代混凝土
 Simulation Approaching Ancient Concrete with Contemporary Ideal Fuller's Grading Curve and Cementitious Materials
 湛淵源、陳駟佑、吳明濬
- 區塊鏈技術應用於營建工程品質查驗之研究
 The Application of Blockchain Technology to Construction Quality Inspection 王何康
- 台灣輕鋼構本土化過程之探討
 A Study of Localization Process on Light-gauge Steel-framed in Taiwan 朱芸霈、蔡宗潔
- 水庫淤泥固化再生細粒料混凝土之性能探討
 The Performance of Concrete Using Hardened Reservoir Silt Fine Aggregate 苗安、許鎧麟
- 公共民生污水下水道以統包方式興建所遭遇品質層面問題之探討-以彰化縣鹿港鎮為例 Discussion on Quality Problems Encountered in the Construction of Public Livelihood Sewage Sewers in a Turnkey -Taking Lugang Town of Changhua County as an Example 蕭豔仕、蔡宗潔
- 工程專案缺失管理系統分析與設計之研究
 Research on Analysis and Design of Missing Management System of Engineering Project 徐嘉均、劉述舜



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- 含與不含卜作嵐巨積混凝土 Mock-up 試驗分析綠色施工選項
 Green Construction Option of Mock-up Test and Analysis for Mass Concrete With and Without Pozzolans
 湛淵源、陳駟佑、吳明濬
- 鋼纖維對自充填混凝土工作性影響之研究
 Effect of Steel Fiber on the Workability of the Self Compacting Concrete
 紀茂傑、葉為忠、張建智、王瑞陽
- 營建工程品質合格率與檢查方式隱含的資料收集方法
 Quality Pass Ratio and Inspection Implied Data Collection Methods for Construction Projects
 吳其恩、張行道



B1 規劃設計與專案管理 I Plan, Design and Project Management I

評審委員: 謝定亞、王維志

■ 建置建築工程 BIM-based 維護管理業主資訊需求模式之研究

The Establishment for Employer's Information Requirements in BIM-based Facility Management

林璐瑤、林祐正

- 數位轉型-運用 PMIS 提升營建管理效率
 Digital Transformation-Using PMIS to Improve Efficiency of Construction Management 林曜滄、周昌典、賴鈺蒨
- A Novel Multi-objective Jellyfish Search Algorithm for Structural Tower Optimization
 Dinh-Nhat Truong and Jui-Sheng Chou
- 洞道工程於卵礫石困難地層之施工挑戰
 Construction Challenges of Tunnel Engineering in Difficult Ground with Gravel
 許耀仁、周永川、莊心凱、徐士捷
- A Novel FBI Optimizer for Project Scheduling
 Ngoc-Mai Nguyen and Jui-Sheng Chou
- 桃園市復興區內奎輝部落坡地崩塌風險分析
 Risk Assessment of Slope Collapse in Neikuihui Tribe in Fuxing District, Taoyuan City
 李姿儀、鐘志忠
- 建築工程 BIM 模型分解結構模式建置之研究

 The Study of Developing Model Breakdown Structures Approach for BIM Models Development of Building Projects

 許雅婷、林祐正
- Comprehensive Comparison of Artificial Intelligence Techniques in House Price Prediction
 Dillon-Brandon Fleshman, Dinh-Nhat Truong and Jui-Sheng Chou
- 區塊鏈技術應用於營建工程品質查驗之可行性賽局理論分析
 Game Theoretic Analysis of the Feasibility of Applying Blockchain Technology to Construction Quality Inspection

 陳佳慶、荷世平



B2 規劃設計與專案管理 II

Plan, Design and Project Management II

評審委員: 王琨淇、莊子毅

■ 臺北捷運 CQ850 區段標之潛盾隧道工程碳足跡分析
An Analysis on Carbon Footprint Inventory of Shield Tunnel Construction on Taipei Metro
System Project CQ850

陳志勇、林利國、高詩婷

- Transforming Existing Freeway Pavement in Place Towards Performance-Based Contract
 Shih-Hsien Yang, Carlos Alejandro Santos and Ning Lee
- 泥作工程生產力之量測 288 間衛浴的案例研究

 Measuring Productivity of Masonry Work A Case Study of 288 Bathrooms

 林建良、王文宗
- 統包工程設計 BIM 模型建置規劃模式之研究

A Study of BIM Design Model Development Plan Approach for Turnkey Architectural Projects

王靜芬、林祐正

- BIM 技術導入營建工程專案之社會網絡分析研究
 Social Network Analysis of Construction Projects Applying BIM Technique 郭瑟均、黃盈樺
- 應用 4D 與 5D 建築資訊模型於水土保持工程施工階段之研究
 The Application of 4D & 5D Building Information Model to the Construction Stage of Soil and Water Conservation Projects
 吴宗叡、陳維東
- 關鍵基礎設施風險管理之研究
 The Study of Risk Management for Critical Infrastructure
 張清祥、廖東成、林祐正
- 結合 BIM 與橋梁管理資訊系統之初步研究
 A Preliminary Study on Integrating BIM and Bridge Management System 黃子綸、姚乃嘉
- 建築資訊模型(BIM)輔助管理工地職業安全衛生之運用 以關渡大橋為例 李旭華、陳其豐



B3 規劃設計與專案管理 Ⅲ

Plan, Design and Project Management III

評審委員: 王廷魁 、林威延

- BIM/5D 建置流程實證分析之研究 Empirical Analysis of BIM/5D Implementation Process 許家瑄、楊智斌
- 探討 Beacon 預警定位技術於施工安全管理之研究
 Application of Beacon Sensor and Positioning Technology in Construction Safety Early Waring System 黃柏凱、林利國、鍾子琳
- BIM + RFID + IoT 創新智慧工地管理平臺實證研究:導入臺北市政府警察局刑事警察大隊辦公 大樓新建工程

林志峯、曾俊傑、陳元鎮、陳逸平、張家瑞、康思敏、張若軒

■ 整合 BIM 與 3D 列印應用於建築工程溝通管理模式之研究

Developing Communication Management Approach Integrated BIM and 3D Printing for Building Projects

陳怡璇、許雅婷、林祐正

■ 發展適用於工程專案管理之 BIM 智慧模組-以裝修工程為例

Developing the Intelligent BIM Modules Suitable for Project Management – A Case Study of Decoration Works

劉家翎、馮重偉

- 頂升換底工程之研究 以隆華新橋 P5 橋墩為例 林哲臣、王珮茹、丑倫彰
- 智慧營造效益之關鍵工作分析
 Analyzing the Benefit of Intelligent Construction at the Task Level 楊立人、陳亮廷
- Vision-Based Autonomous Excavator Productivity Measurement
 Christian Kentaro Nuralim and Min-Yuan Cheng



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C1 物業管理 Property Management

評審委員: 楊立人、黃盈樺

- 以 BIM 輔助建築生產履歷系統

 Construction Production History System Using BIM

 張晟、楊亦東
- 營建廠商以服務彈性為業主創造價值之研究
 The Study of Contractor's Utilizing Service Flexibility to Create Value for Owner 張豑元、紀慧貞、李欣運
- 以建築資訊模型與嵌入式系統呈現實時太陽能模組資訊
 Applying Building Information Modeling and Embedded System to Demonstrate Realtime Solar Module Information
 梁凱倫、張智雄、劉展元、周建成
- 共同管道工程專案導入 BIM 技術案例研析 張家瑞、徐廣懷、康思敏、曾俊傑
- 智慧建築之消費者行為分析之計量實證研究
 Analysis of Consumer Behaviors in Intelligent Building An Empirical Study
 周琳芸、荷世平、徐瑋澤
- 太陽能電站之 AI 維運管理 AI Operation & Management of PV Power Plants 賴榮豐
- 仿生智慧優化深度卷積神經網路於住宅區域時序性能耗暨其特徵轉張量影像之預測研析 郭慶群、周瑞生
- 基於建築資訊模型(BIM)之建築自然通風決策系統開發
 The Development of BIM-based Natural Ventilation Decision Information System 質鈞、蔡明修、黎益肇



C2 工程規劃與排程 Engineering Planning and Scheduling

評審委員: 陳維東、連立川

- 營造工安風險對工程進度與成本之衝擊評估
 Evaluation of Safety Risks Impact on Construction Schedule and Cost
 孫永定、鄭明淵
- 帷幕牆工程吊裝生產力與影響因子之研究
 A Study on the Influencing Factors of Curtain Wall Installation
 林建良、劉家維
- 植基於蒙地卡羅模擬機器學習法建構疏濬工程專案預測系統 林季葦、劉家瑄、周瑞生
- CIM 導入輕軌工程施工應用與實務之研究
 Applications of CIM Technology for Light Rail Engineering During Construction Phase in Practice

陳瑛其、朴德亞、林祐正

- 台灣離岸風場興建暨營運階段風險管理之研究 葉宗達、鐘珮倫、周瑞生
- Inflation Risk in BOT projects in Mozambique: A case study of Nacala-Moatize Railway Line Chume Peter Nhanombe
- 國內冷凍倉儲設計與施工之研究陳拓村、王珮茹
- 施工介面風險對工程工期與成本之衝擊評估
 Construction Interface Impact on Project Schedule and Cost
 歐綺婷、鄭明淵
- 應用 BIM 模組進行地下室施工 4 種施工方式模擬之效益探討
 Discussion on Benefits of Using BIM Module to Simulate 4 Construction Methods of Basement Construction

 洪家祥、陳懿佐



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C3 營建財務與經濟 Construction Economics & Finance

評審委員: 楊智斌、紀乃文

- 啟發式演算法優化多重輸出機器學習技術預測臺灣營建股價 張智斌、陳可恩、周瑞生
- 建立營建專案工程工料編碼之個案分析
 Developing Coding Rules of Construction Projects Case Study
 蘇聖傑、王維志
- 應用區塊鏈技術開發另類房地產交易平台
 Applying Blockchain Technology to Develop the Alternative Real Estate Trading Platform
 林亞蓁、馮重偉
- 從環境態度、環境行為探討坡地保護願付價格研究-以梨山蘋果為例 林正平、高知臨
- Optimized Hybrid System for Financial Time-series Prediction
 Thi Thu Ha Truong, Thi-Kha Nguyen, Asmare Molla Reta and Jui-Sheng Chou
- 運用點雲模型與類神經網路於水土保持工程之概算
 Conceptual Cost Estimations Using Point Cloud Model and Neural Network for Water and Soil Conservation Construction Projects
 蘇子霖、張欽舜、黃世慶、吳瑞鵬、王世旭、王維志
- 結合深度學習及關鍵字搜尋熱度趨勢於臺灣鋼筋價格漲跌幅之預測

 Hybridizing Deep Learning with Google Trends to Predict Rebar Price Fluctuation in Taiwan

 江怡萱、馮重偉
- 影響建築工程預算變更的關鍵因素之研究

 Key Factors Affecting Budget Changes in Construction Projects: An Empirical Study 黃柏樺、游傑勝、李欣運
- 分離式元件晶片成本估算模式之改進 個案研究

 Case Study on Improving Cost Estimations of Discrete Device Wafers

 吳牧真、王維志



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D1 永續營建與生命週期管理 I Sustainable Construction and Life Cycle Management I

評審委員: 黃榮堯、陳怡兆

- Green Building Rating System Evaluations for Sustainability
 Sintayehu Assefa and Hsin-Yun Lee
- 以無線感測儀器監測橋梁淘刷之研究-寶橋及萬壽橋為例
 Research on Monitoring the Scouring of Bridges by Using Wireless Sensors- Bao Bridge and Wanshou Bridge for Example
 李璧汝、曾惠斌
- 綠建築之消費者行為分析 結構方程模型研究

 Analysis of Consumer Behavior in Green Building A Structural Equation Modeling study

 宋承洋、徐瑋澤、荷世平
- Applying Carbon Footprint Assessment on Capital City Relocation in Indonesia Archi Aditya
- 應用知識本體建模技術輔助碳排放計算之研究
 Applying Ontological Modeling Technique to Facilitate the Calculation of Carbon Dioxide Emissions
 石淨語、王翰翔
- 阿里山林業鐵路軌道管理之價值分析研究
 The Value Analysis of Alishan Forestry Railway Track Management
 劉怡廷、林利國、高宗賢
- Study of the Promotion Strategies of the Green Buildings in Mozambique: The Consumer Behaviors and the Proposed Certification System and Standards
 Iolanda Maria Arnaldo Bambo, Shih-Chia Wen, Wei-Che Hsu and Shih-Ping Ho
- 光伏組件在建築表面分佈優化之探討
 Research on Optimization of Photovoltaic Module Distribution on Building Surface 王蘇傑、莊皓翔、劉展元、周建成
- 校園閒置建築物改建為老人福利機構之可行性研究: 以臺中國小忠孝樓為例 林正平、陳彥鈞



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D2 永續營建與生命週期管理 Ⅱ Sustainable Construction and Life Cycle Management II

評審委員: 喻新、文一智

■ 陸域風機之環景視覺化場域建置

Panorama-based Visualization for Onshore Wind Turbines 蔡翊紘、張丙宗、蘇培鈞、何冠霖、吳庭瑜、賴哲儇

■ 應用自適應方法於開發台灣市區綠道路評估系統之宜居性指標

An Adaptive Approach for Developing Livability-related Indicators in Taiwan Green Urban Road Rating System

楊念嘉、楊士賢、Hoai Tran Nam、張行道、蔡雅雯、張之明

■ 從運輸法規發展越南的道路永續指標

Development of Sustainable Indicators for Roadways from a Transport Regulation in Vietnam

Lai T.C. Nguyen and Andrew S. Chang

■ 空間多樣性對中部都市型社區永續發展的影響

The Impact of Spatial Diversity on the Sustainable Development of Urban Communities in Central Taiwan

王韻慈、陳品竹

■ 國際承包商之環境指標揭露程度

Environmental Indicator Disclosure Levels of International Contractors Adolfo Pe and Andrew S. Chang

■ 桃園北海岸自行車道景觀之評估

Assessment of the Landscape of the North Coast Bicycle Lane in Taoyuan 郭宏揚、吳桂陽

■ 綠道路指標之達成程度與提升方法

Greenroads Indicators Achievement Levels and Improvement 張菱芳、張行道

■ 屋頂農園可持續性發展之因素初探 — 以都市大廈型社區為例

Primary Research on the Factor of Sustainable Rooftop Farms Development : Case Studies of Urban Communities

何勝傑、陳品竹

■ 臨時到永久性組合屋改良與應用之研究

Research on Improvement and Application of Temporary to Permanent Prefabricated House 莊明燁、歐陽奇



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D3 資訊科技應用 III Information Technology in Construction III

評審委員: 曾仁杰、王人牧

■ 虚擬實境導入營造業教育訓練之精進探討

A Study on the Introduction of Virtual Reality to the Advancement of Construction Industry Education and Training

沈士斐、陳澤生

■ 工地安全之跌倒偵測 — 以深度學習為工具
Fall Detection of Construction Site Safety: Using Deep Learning as a Tool
鄭群嚴

■ 基於更快速區域卷積神經網路技術之開口防護設施安全辨識研究
Identification of Unprotected Construction Openness based on Faster R-CNN Technique 蔡宛穎、余文德、張憲寬

■ 結合擴增實境及雲端資料庫應用於工地物料管理作業

Applying Augmented Reality and Cloud Database to Managing Material at the Construction Job Site

楊勝智、馮重偉

■ 應用回溯搜索演算法於計數型抽樣驗收計畫之最佳化研究
Optimized Attribute Acceptance Sampling Plans based on Backtracking Search Algorithms
林立喬、蔡幸致

■ BIM 匯出施工圖自動化資訊彙整系統開發之研究

Developing BIM-based Automatic Information Collection System for Shop Drawings in Construction

黃啟源、林祐正

 The Application of NLP Combining with the Chat Robot in the Field of Construction Management

Tsai-Ning Chen, Compal Electronics, Inc. and Po-Han Chen

開發以混合實境為基礎之工程作業系統
 Developing the Mixed-Reality Based System for Construction Operations
 莊大軍、馮重偉

■ 自動化施工之模組化結構接頭設計 楊耀畬、葉芳耀、張家銘、康仕仲



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E1 資訊科技應用 I Information Technology in Construction I

評審委員: 馮重偉、陳介豪

- BIM-based 醫院動線管制系統應用於民用建築之研究
 BIM-based Traffic Control Bundling Aiding System for Residential Buildings 徐向輝、詹皓詠、余孟霖、陳冠霖、宋政哲、林子翔、紀乃文、蔡孟涵
- 建構 BIM 竣工模型資訊輸入與檢核系統之研究
 Developing Automated Entry and Inspection System for Required Information of Final Asbuilt Models
 温雅婷、林祐正
- 資訊科技於橋梁工程施工之應用-以三鶯大橋第一期工程為例 林聰能、曾惠斌
- 建築資訊塑模(BIM)於寬頻管道建設先期研究 張家瑞、吳孟德
- 建築資訊模型工作任務價值評估模式之研究
 The Study of Value Evaluation of Work Items in Building Information Modeling
 鄭銘傑、Nike Evelinda、李欣運
- 利用深度學習的電量預測對需量競價做賽局及實證分析
 Electricity Forecasting Using Deep Neural Networks to Make Game Theory and Empirical Analysis of Demand Bidding
 林至謙
- 設計與施工階段的建築資訊模型技術應用 以瑯歧海峽水廠工程為例
 Building Information Modeling Technology Applied in Design and Construction Stages-Langqi Strait Water Project

 建立川、張之傑
- 整合圖說建置 BIM 設備模型置入自動化程式開發之研究
 Developing Automated System for Facility-based BIM Model Creation Integrated with 2D Shop Drawings
 林昀茹、林祐正
- 疏濬工程風險管理之深度學習聊天機器人設計開發及應用 鐘珮倫、周瑞生



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E2 資訊科技應用 II Information Technology in Construction II

評審委員: 陳柏翰、蔡明修

- Predicting Mechanical Properties of Reinforced Concrete Beams by Optimal Combination of Metaheuristic Machine Learners
 Ngoc-Mai Nguyen and Jui-Sheng Chou
- Metaheuristic Optimization and Machine Learning in Structural Mechanics Simulation
 Stela Tjandrakusuma and Jui-Sheng Chou
- Multiple Dashcam Image Resource-trained Deep Learning Models for Enhancing Road Damage Detection
 Minh-Tu Cao, Kuan-Tsung Chang and Mohammad Ramadhan
- Image Sensing-based Occupancy Estimation for Demand of Installation of Automated External Defibrillators
 Wen-Xin Qiu and Albert Y. Chen
- Beyond What You See by Integrating Metaheuristic-optimized Deep Learning for Detecting Deflections of Structural Beams
 Misael Algape and Jui-Sheng Chou
- Developing Smart BIM Modules by Configuring Space Elements for Wall Finishing Jobs
 Andreas Budi Hartono and Chung-Wei Feng
- Using Virtual Reality and Augmented Reality for Presale House Presentation
 Ben Amed Ouedraogo, Li-Chuan Lien and Unurjargal Dolgorsuren
- Automatic Recognition of Concrete Spall Using Image Processing and Metaheuristic Optimized LogitBoost Classification Tree
 Minh-Tu Cao, Nhat-Duc Hoang and Haris Bahri
- Covid-19 Infection Detection Taiwan (CIDT)-A Visual Aid for Epidemic Investigation with Spatial Awareness Using BIM
 Shameika R. Prentice, Yi-Shiang Shiu and Will Y. Lin



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E3 資訊科技應用 IV Information Technology in Construction IV

評審委員: 周建成、林祐正

- 以模糊層級分析法探討紫外光之發光二極體取代汞燈關鍵因素
 Using Fuzzy Analytic Hierarchy Process to Identify the Key Factors for Replacing Mercury
 Lamp by Lighting Emitting Diode (LED) in Ultraviolet
 陳俞珺、王維志
- 以 BIM 與 VR 為基礎之橋梁工程 5D 模擬 童聖涵、陳威志、趙子綺、王琨淇
- 以電腦視覺與深度學習建構河川疏濬場域砂石輸運卡車車牌即時辨識系統 劉家瑄、周瑞生
- 應用環景拍攝與虛擬實境技術記錄消防設備空間分布與屬性資訊
 Recording Locations and Attributes of Fire Protection Equipment Using Panorama and Virtual Reality Techniques
 江承澤、張珉榛、李品毅、洪冠楨、楊千弘、賴哲儇
- COBie 資料存取與應用-以設備報修系統為例
 COBie Data Manipulation and Application An Equipment Repair System 葉乙璇、黃瀞瑩、吳翌禎、莊正昀
- UAV 於土方與橋梁工程監測應用之研究
 A Study for UAV Applied in Earthwork and Bridge Construction Management 察仁卓
- 結合 BIM、UAV 與 VR 技術以利工程之展示 Integrating BIM, UAV and VR to Facilitate Construction Demonstrations 高任杰、童聖涵、周淵袖、王琨淇
- 利用自動索引程式及人工智慧建立類神經網絡優化系統預測住宅總用電量 許陞銘、郭慶群、周瑞生
- 運用 Unity 3D 建立模組化之虛擬實境危害辨識訓練系統 以水土保持工程為例
 Development of Modularized VR Hazard Identification Training System Using Unity 3D for Soil and Water Conservation Projects
 黃映瑄、曾仁杰



F1 防救災與風險管理

Disaster Prevention and Risk Management

評審委員: 林利國、廖彬超

中央與地方防救災情資整合研究 — 以宜蘭縣為例
 Pilot Project on Central and Local Disaster Management Information Integration - Take
 Yilan County as an example
 詹子毅、莊睦雄

■ 以線上系統檢視土石流防災地圖資訊之時效與成效評估
The Efficiency and Effectiveness of Reviewing Debris Flow Evacuation Maps with an Online
System

曹鼎志、簡榮興、夏天祐、鐘啟榮、黃效禹、鄭耕秉

- 基於影像距離計算技術之工地開口危害辨識研究
 Identification of Site Opening Hazards based on Image Distance Calculation Techniques
 謝堉程、余文德、張憲寬
- 臺灣家養寵物防災管理機制之可行性探討
 Research on the Feasibility of Pet Disaster Prevention Management in Taiwan 蕭湘、林利國
- 結合 BIM 與 IoT 輔助於視覺化動態室內逃生系統架構設計
 Designing a BIM & IoT-based Visual and Dynamic Indoor Evacuation System 郭韋良、李秋明、張芸翠、紀乃文、黃伯凱、戴廷宇、楊懿、謝尚賢
- 應用資料探勘技術探討天氣及空氣品質因子於營造工程人員重大職業災害之影響

 Data Mining for Correlation Between Weather/Air Quality and Worker's Major Accidents in Construction Industry

 張峻豪、曾仁杰
- 虛擬實境結合地工泡棉應用於電梯井防墜之研究

 Virtual Reality Combines Geofoam Applied in Preventing Fall in Elevator Pit 高知鼎、林利國、蔡侑成
- 營建業多參數墜落職災風險評估模式
 Multi-parameter Fall Accident Risk Evaluate Model in the Construction Industry

 鄧人魁、鄭明淵



F2 營建法規與爭議處理 Construction Laws and Dispute Resolution

評審委員: 黃榮堯、范素玲

- 民間參與托育服務之閒置空間活化再利用
 Adaptive Reuse of Vacant Space for Private Participation in Childcare Services
 簡良謙、楊亦東
- 制定大型工程專案價值工程實施規範指引之研究 以捷運工程為例 黃俊、謝定亞
- 營建業聯合承攬投機與合作關係研究 以賽局理論模型分析 葉易、荷世平
- 國內公共工程專案時程管理規範之研究
 Schedule Management Specifications for Public Construction Projects in Taiwan 魏彣芯、楊智斌
- The Construction Safety Guideline Initiatives for the Construction Sector in Indonesia Andina Mugi Utami, Han-Hsiang Wang and Akhmad Suraji
- 公共工程開口施工契約性質分析及履約爭議之研究-以司法判決為核心 吳禹錡、謝定亞
- 經營共享經濟平台之策略重點研究:以台灣優步為例
 Strategic Focuses of the Management of Sharing Economy Platform The Case Study of Taiwan Uber

 龐笠民
- 監造類型與工時關係之探討
 Investigations of the Relationships between Supervision Types and Man-hours for Private Construction Projects

 劉為杰、王維志
- 投機競標者在風險行為下之決策行為探討最有利標評選

 Discussion on the Most Advantageous Tender Selection Based on the Decision Behavior of Speculators

 林正平、林煥庭、林原平



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F3 其他 Others

評審委員: 林建良、王翰翔

■ 營造業從業人員疲勞、注意力與安全行為關聯性之探討

A Study on Identifying the Correlations between Construction Workers' Burnout, Attention and Safety Behavior

陳橖稘、干翰翔、黃植懋

■ 營建業中高齡專業技術工種工作能力探討之研究 林意閔、謝定亞

■ 交易成本觀點之工程顧問業專案經理應具備之核心能力及較佳學習路徑

The Core Competence of the Project Manager in a Consultant Company via the Transaction Cost Perspective and its Better Learning Path

周政模、曾惠斌

■ 無人機在新建宜蘭橋工程上之應用

孫浩庭、吳至誠

■ 建構 BIM-based 歷史建物資訊整合模式之研究-以新營縣府日式木造官舍為例

The Development of BIM-based Historical Building Information Integration Method: Using Official House of Xinying as an Example

謝佩秦、陳怡兆

■ 群集分析演算法精進崩塌目錄品質

Improving Landslide Inventory Quality with Cluster-based Algorithms

黃俊議、賴哲儇

■ 人本安全原則應用於營造業分析探討

Analyzing the Application of People-based Safety Principles in the Construction Industry 陳正傑、王翰翔

■ 知識圖譜及推薦系統在 BIM 元件知識共享平台的應用

The Application of Knowledge Graph and Recommendation System in the BIM Component and Knowledge Sharing Platform

羅紫萍、張玉萍、李秉展

■ 違章建築拆除工程人力配置最佳化模式之研究

Manpower Allocation for Demolition of Illegal Buildings Research on Optimization Model 廖佳銘、鄭明淵



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G1 工程採購與民間參與 Construction Procurement and PPP

評審委員: 王世旭、曾浩璽

- The Study of Owner's Project Segmentation for Decreasing Bidding Price Akhmad F.K. Khitam, Sintayehu Assefa and Hsin-Yun Lee
- 民間投資興建發電廠合約增加建廠擴充條款之財務效益評估
 The Financial Analysis of Independent Power Producer (IPP) with Extended Terms of Plant Construction in the Contract
 陳博亮、陳敏河、熊慧娟
- 循環經濟導入台灣公共建築工程之綜合評估
 Comprehensive Evaluation of Circular Economy in the Implementation of Taiwan's Public Building Construction Engineering

 周政模、曾惠斌
- 營造廠應用專案成功度指標遴選最佳專業協力廠商組合之研究

 Modeling Construction Subcontractor Performance Prediction and Combination Optimization

 陳揚勳、鄭明淵
- The Study of the Relationship between Performance Bond and Contractor's Will to Bid
 Yi Tai, Jesica Tjandranegara, Kevin Hendra Putra and Hsin-Yun Lee
- BIM 與 UAV 傾斜測繪技術於廠區導覽與管理研究

 Study on BIM with UAV Tilting and Mapping Technology for Factory Area Navigation and Management

 干其聖、連立川、陳威達
- Optimal Capital Structure of Public-Private-Partnership (PPP) Power Plant Projects for Investment Decision
 Borliang Chen, Hue-Chiuen Shiong
- 石化廠區營建從業人員工作壓力與工作滿意度關係之研究-以 X 公司工務部為例 A Study on the Relationship between Job Stress and Job Satisfaction of Petrochemical Plant Construction Staff A Case Study of Construction Department in a Company 林志彦、陳維東
- Evaluation of Corporate Social Responsibility for the Hungarian Construction Industry Gardony Attila and Min-Yuan Cheng