CONTENTS

ISSN 1859-1531 - The University of Danang - Journal of Science and Technology, Vol. 22, No. 6A, 2024

ENGINEERING AND TECHNOLOGY

Designing an artificial intelligence-based model for electric motor fault diagnosis to support maintenance decision-making	
Ho-Si-Hung Nguyen, Thi-Hoang-Giang Tran, Manh-Tien Luu, Huy-Vu Tran	1
Development of a wearable device for heart rate monitoring and fall detection using machine learning to analyze and detect early anomaly of cardiovascular conditions	
Van-Thai Nguyen, Nhut-Minh Tran, Phuong-Nam Tran, Thu-Ha Tran, Thanh-Kieu Tran Thi, Van-Khoa Pham	7
Development of shear strength prediction model for RC beams strengthened with FRP strips based on a novel ensemble learning model	
Huynh P. Nam, Nguyen D. D. Nam, Nguyen H. Thinh, Phan H. Nam, Ho M. Hung, Do V. Hai, Phan D. Thao	13
Estimate the impact of deep excavation construction in high-rise buildings on neighboring structures <i>My PHAM, Khanh-Toan LE</i>	19
Estimation of ultimate bearing capacity of strip footings on cohesive-frictional soils using non-linear shear strength model	00
Pham Ngoc Quang, Pham Ngoc Vinh	29
Experimental and analytical investigations on flexural performance of corroded RC beams using RBSM-based corrosion model	
Nguyen Cong Luyen, Mai Anh Duc, Nguyen Hong An	35
Exploring the potential of swarm intelligence for optimal energy efficiency in IoT downlink system Vien Nguyen-Duy-Nhat, Hung Nguyen-Le	41
Implementing AI on low-power embedded devices for digital water meter identification and data transfer via lora network	
Thai Vu Hien	46
Investigating ultrasonic dispersion of nanostructured silica for nanocomposite materials application Phan Thi Thuy Hang	52
Modeling and simulative analysis of shift control for at powertrain on the car	
Duc Lich Luu, Luong Duyen Hai, Tran Cong Thang, Nguyen Van Vu, Dang Minh Hieu	57
Port-hamiltonian formulation of an electrical circuit using different kinds of states Hoang Ngoc Ha, Ho Phuoc Tien	63
Real-time collection of the functional parameters for a passive house Eduard Nicolae Pătru, Petru Crăciun, Vladimir Tanasiev, Duong Minh Quan, Le Xuan Chau	67
Research on cycling power estimation and prototype of a GPS bike computer based on system-on-chip platform	
Huynh Viet Thang, Vu Van Thanh	73
Unveiling the antibacterial potential of nature-inspired material for designing food-related coatings Yen Dang, Khuong Ba Dinh, Tien Thanh Nguyen, The Hy Duong	77
Valuating the impact of biodiesel B10, B20 on lubricating oil in a commonrail diesel engine Nguyen Hoang Vu	82