CONTENTS

6
24
42
62
02
70
72
88
106

FOCUS: THE USE OF NEW DIGITAL TECHNOLOGIES IN THE CONSERVATION, ANALYSIS AND DISSEMINATION OF CULTURAL HERITAGE David Ruiz Torres

INTRODUCTION	120
1. DOCUMENTATION, DIAGNOSIS AND CONSERVATION 1.1 WIRELESS SENSOR NETWORKS (WSNS) 1.2 BIM (BUILDING INFORMATION MODELLING) 1.3 METADATA MANAGEMENT SYSTEMS 1.4 DIGITAL PHOTOGRAMMETRY/3D LASER SCANNING 1.5 RTI (REFLECTANCE TRANSFORMATION IMAGING) 1.6 ROBOTICS AND DRONES/UAVS 1.7 3D DIGITAL MODELS 1.8 AUGMENTED REALITY APPS 1.9 PROJECTION MAPPING 1.10 3D PRINTING	123 124 126 127 129 133 134 136 138 139
 DISSEMINATION, ENHANCEMENT AND EDUCATION 1 HERITAGE IN THE DIGITAL MEDIUM THE DIGITAL MEDIUM IN HERITAGE SITES APP UNIVERSE: MOBILE HERITAGE FOR DISSEMINATION AND ENHANCEMENT WEARABLES: VR AND AR SMARTGLASSES MATERIALISING DIGITAL HERITAGE 	142 143 155 162 170 173
3. RESEARCH 3.1 DATA ACQUISITION AND 3D DIGITISATION 3.2 ANALYSIS AND INTERPRETATION 3.3 COMPUTER GRAPHICS AND 3D ENVIRONMENTS 3.4 AUDIENCE CASE STUDIES	178 179 182 188 191
CONCLUSIONS	194
BIBLIOGRAPHY	196