

TOOLS AND METHODOLOGIES FOR MANAGEMENT AND ANALYSIS OF SPATIAL DATA	S01-01	12:30 - 14:00H	S01-02	12:30 - 14:00H	METHODOLOGIES AND STRATEGIES BASED ON GRAPHICAL ENGINEERING
	<p>Urban and transportation transformation in seville: the legacy of the expo'92 bridges and their projection into the ai era</p> <p>Improving the greenhouse spring crop classification from sentinel-2 time series in almeria (spain)</p> <p>Benchmarking artificial intelligence methods to classify greenhouse crops in almeria from sentinel-2 multi-temporal images: summer/autumn campaign 2016</p> <p>Application of bim and facility management in historical buildings: a case study of the nave 30 of the fábrica de armas de toledo</p> <p>Urban quality at the university of Málaga</p>	<p>Pablo Morato-Huerta, Manuel Morato-Moreno</p> <p>Manuel Ángel Aguilar, Fernando José Aguilar, Abderrahim Nemmaoui, Antonio Jesús Fernández-García</p> <p>Abderrahim Nemmaoui, Fernando J. Aguilar, Antonio J. Fernández-García, Manuel A. Aguilar</p> <p>Rocio Porras Porras (1), Fidel Lozano Galant (2), Alba María Hidalgo León (1), Francisco Javier Castilla Pascual (3), José Antonio Lozano Galant (1)</p> <p>Noelia Muñoz Amores, Manuel Damian Marín Granados, Francisco José Ortíz Zamora</p>	<p>Cad parametric geometry models: a useful tool for biomechanics and mechanobiology</p> <p>Impact of femoral stem positioning on bone stress and clinical outcomes in total hip arthroplasty: a voxel-based finite element study</p> <p>Influence of stems and metaphyseal cones on bone stress in revision total knee arthroplasty: a voxel-based finite element study</p> <p>Comparative study of the dimensioning and tolerance analysis modules in several parametric 3d cad applications</p> <p>Topological optimisation of biodegradable plastic products for material reduction and surface area increase</p>	<p>Oscar Paseta, Ian Campos, Pablo Fanlo, José Manuel García-Aznar, María José Gómez-Benito</p> <p>Andrea Ariznavarreta Márquez, Nel Iglesias Rodríguez, Jorge Rocés García</p> <p>Omar Menéndez Testa, Jorge Rocés García</p> <p>Fernando Brusola (1), Ignacio Tortajada (1), Antonio Valín (2), Ángeles Esandi (2), Jorge Montalvá (1), María Moncho (1)</p> <p>Maidor Iturrondobeitia, Jose Camilo Suarez, Hugo Afonso, Julen Ibarretxe, Xabier Amezua, Rikardo Minguez</p>	
MANAGEMENT OF PRODUCTS AND PROCESSES	S01-03	15:30-17:00H	S01-04	15:30-17:00H	MANAGEMENT OF PRODUCTS AND PROCESSES
	<p>Remote sensing of concrete slabs: a uav-based approach using fourier transform and pca</p> <p>Automated detection and geolocation of banana trees based on deep learning from very-high-resolution rgb uav images</p> <p>Design for human-baboon conflict management: animal location using a sensor network ecosystem</p> <p>Reconstruction of a historical climatic dataset for limón, costa rica (1886-1890): implications for energy simulation and architectural heritage analysis</p> <p>Re-discovering the coquun: cartographic experiments unfolding time and space.</p>	<p>David E. Acuña-Ureta (1), Marta Torres González (2), Andrés J. Prieto (1), Rodrigo Toro Icardi (1), Matias Armando Pineda (1), Gianfranco Pisani (1), Felipe Guíñez (1), Marcelo González Hormazábal (1), Álvaro González (1)</p> <p>Fernando J. Aguilar, Alfredo Alcayde, Marcos E. Valverde, Abderrahim Nemmaoui, Manuel A. Aguilar</p> <p>Marta Siguín (1,2), Roberto Casas (1,3), Justin O'Riain (4), Teresa Blanco* (1,2)</p> <p>Emily Vargas-Soto</p> <p>Irene Perez Lopez</p>	<p>Analysing public bus transport networks using graphical visualization techniques based on graph theory</p> <p>Redesign of a car wheel hub with reverse engineering and computer-aided design tools</p> <p>3d experience, in the design and industrialization of aircraft aerostructures: a case study</p> <p>Using 3dexperience in a concurrent engineering process: assembly of a turboprop engine</p> <p>Construction 4.0 and 3d-printed housing: innovation for seismic zones</p>	<p>Marina Díaz Jiménez, Alba Ambrosio Costoya, Patricia Ruiz, Pablo Pavón Domínguez</p> <p>Xabier Amezua (1), Gaizka Erkizia (2), Mikel Iturrate (2), Mikel Jauregi (2), Olatz Etxaniz (1), Xabier Garikano (2), Eneko Solaberrieta (2)</p> <p>Manuel Oliva-Olvera (1), Raúl Alfaro-Pérez (1), Jorge Juan Martínez-Del Río (2), María Gloria Del Río-Cidoncha (2)</p> <p>María Gloria Del Río-Cidoncha (1), Domingo Palma-Morales (2), Javier Rendón-Rodríguez De Molina (2), Rafael Ortiz-Marín (1), Alfonso Emilio Martínez-Del Río (1)</p> <p>Claudia Marcela Muñoz, Rodrigo Garcia Alvarado, Alexander Opazo Gonzalez</p>	

DIGITAL TOOLS AND ARTIFICIAL INTELLIGENCE	S02-01	12:30 - 14:00H	S02-02	12:30 - 14:00H	MANAGEMENT OF PRODUCTS AND PROCESSES
	<p>Blockchain, ai and data visualization: history and evolution of design in digital archives</p> <p>Autocad automation through python scripting</p> <p>Integrating ensemble learning to classify circular city indicators to the 17 sustainable development goals: a multi-method framework for coverage and gap analysis</p> <p>Procedure for solid modelling and morpho-geometric analysis of a crystalline lens using 3d scanning and digitization techniques</p> <p>Development of a digital twin for industrial engineering: connecting sensors and actuators to ar/vr applications</p>	<p>Martina Liboni, Francesca Mucchetti, Pier Paolo Peruccio</p> <p>Antonio Fernández (1), Lucía Díaz Vilariño (1), Francesco Bianconi (2)</p> <p>Nadia Falah (1), Navid Falah (2), Madelyn Marrero (1), Jaime Solis-Guzman (1)</p> <p>José Velázquez, Dolores Ojados, Adrián Semitiel, Francisco Sáez, Francisco Cavas</p> <p>Valentin Gomez-Jauregui, Noemi Barral-Ramon, Jose-Andres Diaz-Severiano</p>	<p>Engineering graphics applied to the assembly process of a single-cylinder high-pressure steam engine with a corliss valve gear</p> <p>Study of the lidinoid lattice structures as a substitute of expanded polystyrene foams (eps) in bicyclist helmets</p> <p>Designing an age-friendly color palette: enhancing color perception in products and graphic information for the elderly</p> <p>Semiactive orthosis for the treatment of equinus foot</p> <p>Augmented reality for machinery layout optimisation in olive oil mills: an innovative approach</p>	<p>José Ignacio Rojas-Sola, Santiago Sánchez-García</p> <p>Ramón Miralbes Buil, David Ranz Angulo, José Antonio Gómez García</p> <p>Maria Moncho Santonja, Jorge Montalvá Colomer, Guillermo Peris Fajarnés, Beatriz Defez, Eva Burguera Sierra, Jose Antonio Cuesta Barrios, Ignacio Tortajada Montañana, Fernando Brusola Simón</p> <p>Javier Martín Domínguez</p> <p>Diego Francisco García-Molina, Jorge Manuel Mercado-Colmenero, Adonis Jose Pabuena-García, Cristina Martín-Doñate</p>	
	S02-03	15:30-17:00H	S02-04	15:30-17:00H	
	<p>Design and development of an affordable, ergonomic bionic hand for improved daily functionality</p> <p>Integration of artificial intelligence and open-source tools for intelligent natural language queries on ifc models: an accessible and collaborative solution</p> <p>Integration of artificial intelligence tools in architectural design and construction planning processes. case study of a single-family house in ecuador</p> <p>Custom geometrical reconstruction of human corneal surfaces based on nurbs curve optimization by an evolutionary algorithm: a preliminary study.</p> <p>Artificial intelligence as a tool for translating abstract languages into architecture</p>	<p>Isabel Seguí Verdú (1), Alba Rey De Viñas Redondo (2), Larisa Dunai (1), Luis Taroncher Pellicer (1)</p> <p>1. Departamento Ingeniería Gráfica. Universitat Politècnica de València, Valencia, Spain</p> <p>2. ETSII. Universitat Politècnica de València, Valencia, Spain</p> <p>Norena Martín-Dorta (1), Ana Pérez-García (1), Ángel Díaz-Murillo (2)</p> <p>1. Universidad de La Laguna, San Cristobal De La Laguna, Spain</p> <p>2. Consultor BIM, Sevilla, Spain</p> <p>Byron Andrés Morales-Chamorro (1), Eduardo Vázquez-López (2)</p> <p>1. Universidad Católica Andrés Bello, Caracas, Venezuela</p> <p>2. Universidad de Sevilla, Sevilla, Spain</p> <p>Francisco L. Sáez Gutiérrez, José S. Velázquez Blázquez, Francisco Cavas Martínez</p> <p>Technical University of Cartagena, Cartagena, Spain</p> <p>Cintya Eva Sánchez Morales, José Carlos López Cervantes</p> <p>ETSAG UGR, Granada, Spain</p>	<p>Ergonomic design considerations for next-generation smart walkers: enhancing mobility and safety ergonomic design aspects of walkies robotic walker development</p> <p>Review of plm integration in the models, methods, and artifacts of pmbok</p> <p>Data-driven design for optimized running shoe midsoles using additive manufacturing and ai-based lattice adaptation</p> <p>Relief interpretation with twinmotion</p>	<p>Sui Liang, Larisa Dunai, Isabel Verdú Seguí</p> <p>Alejandro Agote Garrido, Alejandro Manuel Martín Gómez, Juan Ramón Lama Ruiz</p> <p>Ana Maria De Juan Iglesias, Daniel Moreno Nieto, Lucía Rodríguez Parada, Daniel Moreno Sanchez</p> <p>Sergio Andrés Medina Rodríguez</p>	<p>GRAPHICAL ENGINEERING IN SUPERIOR EDUCATION</p>

27th June 2025

GRAPHICAL ENGINEERING IN SUPERIOR EDUCATION	S03-01	9:30-11H	S03-02	9:30-11H	DIGITAL TOOLS AND ARTIFICIAL INTELLIGENCE
	<p>Neb design: design of a teaching methodology to implement the new european bauhaus in higher technical studies.</p>	<p>Mar Melgarejo-Torralba, Sandra Planes-Tenza, Dolores Parras-Burgos, Emilio López-Salmerón, Francisco J.F. Cañavate, Daniel G. Fernández-Pacheco</p>	<p>Enhanced virtual reality reconstruction: deep learning approaches for realistic architectural space representation</p>	<p>Riccardo Tavalare (1), Elena Cabrera Revuelta (2), Cesare Verdoscia (1)</p>	
	<p>Project-based learning for the design, modeling, calculation, augmented reality and physical model of a mining derrick structure</p>	<p>Noemi Barral-Ramon, Jose-Andres Diaz-Severiano, Valentin Gomez-Jauregui</p>	<p>Towards a flexible vr-based product evaluation system: a customizable approach for designers</p>	<p>Almudena Palacios-Ibáñez, Laura Ruíz-Pastor, Carlos García-García, Francisco Felip-Miralles, Julia Galán</p>	
	<p>Exploring the integration of bim in civil engineering education: a look at current practices in spain</p>	<p>Cristina Manchado, Pedro Lastra-González, Borja Arroyo, César Otero</p>	<p>Smart pedestrian signaling devices</p>	<p>Noelia Muñoz Amores, Manuel Damián Marín Granados, Francisco José Ortiz Zamora</p>	
	<p>Application of generative artificial intelligence in intersection design: a case study in road design</p>	<p>Rubén Abad Rubén Abad, Irene Sentana Irene Sentana, Juan Llorca-Schenk Juan Llorca-Schenk</p>	<p>Integrating 3D Printing Parameters into Technical Drawings: A Framework for Seamless Additive Manufacturing</p>	<p>Faust Séculi , Fernando Julián , F. Xavier Espinach , Manel Alcalà , Joan Ximinis</p>	
<p>Color characterization and cataloging of historic buildings in the ensanche of san sebastián: an educational and research experience</p>	<p>María Senderos Laka, Maialen Sagarna Aranburu, José Javier Pérez Martínez, Fernando Mora Martín, Juan Pedro Otaduy Zubizarreta, Mireia Roca Ceberio, Ana Azpiri Albistegui</p>	<p>Use of lidar maps for the analysis of differential movements in buildings</p>	<p>Rubén Darío Cano Marín, Juan Manuel Delgado Sánchez</p>	<p>TOOLS AND METHODOLOGIES FOR MANAGEMENT AND ANALYSIS OF</p>	