

25th June 2025

Poster Session P01 11:30h - 18:30h [12:10h and 15:10h]*
* Authors are required to be present beside their poster at 12:10 PM and 3:10 PM

GRAPHICAL ENGINEERING IN SUPERIOR EDUCATION	METHODOLOGIES AND STRATEGIES BASED ON GRAPHICAL ENGINEERING	DIGITAL TOOLS AND ARTIFICIAL INTELLIGENCE	MANAGEMENT OF PRODUCTS AND PROCESSES	TOOLS AND METHODOLOGIES FOR MANAGEMENT AND ANALYSIS OF SPATIAL DATA
<p>Tectographic methodology: from pencil to bim María Del Valle García Soria, Fernando Rico Delgado, Pablo Díaz Cañete, María Del Rosario Chaza Chimeno</p> <p>Evaluating the integration of artificial intelligent tools in graphical engineering courses Diego-José Guerrero-Miguel, María-Belén Prendes-Gero, Ruth Fernández García, Marta Menéndez Fernández, Rafael Rodríguez-Galindo Díez), Pablo Pando Cerra</p> <p>Graphical expression in engineering: implementation of pbl and 3d printing as innovative pedagogical tools Idoia San Sebastian , Gaizka Erkizia, Eva Rodríguez , Maider Iturrondobeitia)</p> <p>Integrating cedg into descriptive geometry education: effects on academic performance Laura García-Ruesgas, Manuel Prado-Velasco</p>	<p>A graphical method for determining the optimal position of the rtg carriage for dismantling by lowering optimal centroid. Raquel Gómez Cabrera, Juan Jesús Lara Sánchez</p> <p>Graphical techniques applied to the evaluation of animal movement José Manuel Valderrama-Zafra, Raúl Torres-Román, Antonia Oya-Lechuga</p> <p>Flat patterns of general developable ruled surfaces in cedg Manuel Prado-Velasco, Laura García-Ruesgas</p>	<p>Assessing the current use of isolated buildings in andalusia through ai techniques Cristina Torrecillas, Francisco J. Ramos-Sánchez, Natalia Martínez-Gómez</p> <p>Innovating creativity: the role of generative artificial intelligence in graphic design education Mikki Schindler</p> <p>Data-driven approaches in engineering visualization for sustainable optimization of advanced construction materials Patricia Abril-Jiménez, Lucía Garijo Alonso, Sofia Sánchez-Mateo</p> <p>Augmented reality for heritage conservation and public engagement: hbim-based digital reconstruction of the monastery of san jerónimo de buenavista in seville, spain. Daniel Antón García, Fernando Rico Delgado, Pablo Díaz Cañete, Francisco Ramón Lozano Martínez</p> <p>Spatial data analysis towards achieving an artificial access consciousness (aac) using knowledge graphs (kg), large language models (llm), and graph-driven reasoning (gdr) Javier Arévalo, Juan I Latorre, Francisco J Flor, Eduardo Martínez</p> <p>Reframing urban morphology for ai. integrating qualitative datasets for specialized artificial intelligence. Caterina Juric, Ezgi Nur Güngör, Alessandro Lovisolo</p> <p>Advanced analysis of sashimono: a traditional japanese woodworking technique Jose-Andres Diaz-Severiano, Valentin Gomez-Jauregui, Noemi Barral-Ramon</p> <p>Exploring large language models for cad automation: a case study with catia scripting Héctor De Pablo Pascual, Santiago Delgado Vaquero, David Escudero-Mancebo</p>	<p>Modeling and digital fabrication of the f50 sailgp catamaran using catia v5 and fdm technology José Serrano Gómez, Manuel Morato-Moreno</p> <p>From ux to design for wellbeing: which research is needed to develop pleasing products Aurora Berni, Yuri Borgianni</p> <p>Sustainable design using technical-functional and socio-collaborative tools Irene Ramos Lapesa, José Luis Santolaya Sáenz, Anna Biedermann, Natalia Muñoz López</p> <p>Use of finite elements to verify the aptitude of the iberian falcata for combat Emilio Ramírez-Juidias</p> <p>Fabrication of an additive manufactured mold for the production of a drone engine cover using the infusion composites process Clara Luna Martin Compaired, Ramon Miralbes, David Ranz, Jose Antonio Gomez</p> <p>Assessing the sustainability of a childcare service in a rural area of zaragoza (spain) Laura Diago Ferrer, Jose Luis Santolaya Sáenz, Natalia Muñoz López</p> <p>Guidelines for the successful design of products with environmental certifications Lesly Sierra-Fontalvo, Yuri Borgianni , Aurora Berni , Laura Ruiz-Pastor</p> <p>Optimization of printing parameters for a ceramic-adapted 3d printer Ana Pilar Valerga Puerta, Elena Cabrera-Revuelta, Nicolás Morales Blanco</p> <p>Integration of smart products into product lifecycle management (plm): strategies for data capture and modeling Teresa Ramos-Calderón, Mª Jesús Ávila-Gutiérrez, Juan Ramón Lama-Ruiz</p>	<p>3d indoor evacuation plans from point clouds for visually impaired people. Lucía Díaz Vilaríño, Rubén Fernández Abeijón, Jesús Balado, Jose Antonio Alonso Rodríguez, Jose Luis González Cespón</p> <p>Modelling of historical buildings using 3d gis: the defensive wall of seville as a representative case study. Francisco M. Hidalgo-Sánchez, David Rubia-Caba, Emilio J. Mascort-Albea, Margarita Infante-Perea, Concepción Cantillana-Merchante</p> <p>Optimizing a pilot plant facility layout based on point clouds Lucía Díaz Vilaríño, Antonio Fernández Álvarez</p> <p>Urbanization and circularity: analyzing the role of urban growth in seville's circular economy transition Nadia Falah, Navid Falah, Jaime Solis-Guzman, Madelyn Marrero</p> <p>Methodology for comparing the sustainability of different renewal models applied in retail spaces Aranzazu Fernández-Vázquez, Anna Maria Biedermann, Natalia Muñoz López, José Luis Santolaya Sáenz</p> <p>Critical comparison between professional scanner and 3d scanning mobile application Marta Torres González, Margarita Infante Perea, Concepción Cantillana Merchante, José Carlos Galán Jiménez, Miguel León Muñoz</p>

26th June 2025

Poster Session P02 11h - 17h [11:40h and 15:10h]*

*Authors are required to be present beside their poster at 11:40 AM and 3:10 PM

GRAPHICAL ENGINEERING IN SUPERIOR EDUCATION	METHODOLOGIES AND STRATEGIES BASED ON GRAPHICAL ENGINEERING	DIGITAL TOOLS AND ARTIFICIAL INTELLIGENCE	MANAGEMENT OF PRODUCTS AND PROCESSES	TOOLS AND METHODOLOGIES FOR MANAGEMENT AND ANALYSIS OF SPATIAL DATA	MISCELLANY
<p>"smart heartbeats". a student project developed within the framework of multidisciplinary teaching</p> <p>Luis Taroncher, Aitana Vanaclocha, Ana García, Alejandro Rodríguez-Ortega, Sandra Munera</p>	<p>3d geometric and visual modeling applied to organic morphologies.</p> <p>Carmelo López, Alberto Cobos, Juan Antonio Peña , Sergio Sánchez-Fenollosa</p>	<p>Unlocking ai's creative potential in climate-responsive architectural design</p> <p>Jose Carlos Lopez Cervantes, Cintya Eva Sanchez Morales</p>	<p>Analysis of consumer trends and attitudes towards repair of small household appliances in spain from a product design approach.</p> <p>Pedro Rovira-Menaya, Yeray Sañudo, Laura Aguado-González, Carmelo Pina, Jorge Sierra Pérez</p>	<p>The canal de castilla in the 21st century: conservation challenges and development opportunities</p> <p>Angel Mariano Rodriguez Perez, Julio Jose Caparros Mancera, Antonio Garcia Chica, Lucia Olmo Rodriguez, Cesar Antonio Rodriguez Gonzalez</p>	<p>Digitisation and geometry of the arches of the new bridge of ronda: comparative morphological analysis with other historic bridges and aqueducts</p> <p>Daniel Torres-Blanco, M. Carmen Ladrón-De-Guevara-Muñoz, Rafael Enrique Hidalgo Fernández</p>
<p>Learning to teaching industrial drawing: comparison with traditional methods</p> <p>Diego Francisco García-Molina, Juan Manuel Montalvo-Gil, Daniel Díaz-Perete, Eduardo Bonet-Martínez, Francisco Javier Carrasco-Vila, Bartolomé Carrasco-Hurtado</p>	<p>Design, geometric optimization and generative design and prototyping of a bicycle stem using three software</p> <p>Gaizka Erkizia, Xabier Amezua, Mikel Iturrate, Mikel Jauregi, Olatz Etxaniz, Xabier Garikano, Eneko Solaberrieta</p>	<p>An analysis of the temporal consistency of the user's opinion about product design attributes: a case study with household products</p> <p>Carlos García-García, Almudena Palacios-Ibáñez, Julia Galán, Francisco Felipe-Miralles, Manuel Contero</p>	<p>Conceptual design of a collaborative nesting system for shipbuilding.</p> <p>Pablo Morato-Huerta, Juan Ramón Lama-Ruiz, Alejandro Manuel Martín-Gómez</p>	<p>Development of an application for visual exploration of hyperspectral images</p> <p>Sandra Munera, Francisco Albert, Alejandro Rodríguez-Ortega, Jose Blasco, Nuria Aleixos</p>	
<p>Graphical expression in civil engineering degrees: content and methodologies</p> <p>Pedro Lastra-González, Borja Arroyo Martínez, Cristina Manchado, César Otero</p>	<p>Comparative of estimation of crown volume of fruit trees by traditional methods and terrestrial lidar.</p> <p>Manuel José León Bonillo, Antonio Miguel Pérez Romero, Rubén Martínez Álvarez, Marta Díaz Vega, Carmen Marín Buzón</p>	<p>From hand-drawn to ai-enhanced: assessing the impact of ai in sketch development</p> <p>Sergio De La Rosa Silva, Miguel-Angel Pardo-Vicente, Pedro F. Mayuet, Lucía Rodríguez-Parada</p>	<p>A more sustainable scooter approach using natural composite materials.</p> <p>David Ranz, Clara Luna Martín, Carmelo Pina, Ramón Miralbes, Marcin Barburski, José Antonio Gómez</p>	<p>Geostatistical approaches for the estimation and validation of air pollution forecasting maps</p> <p>María Inmaculada Rodríguez-García , María Gema Carrasco-García, Maria Da Conceição Rodrigues Ribeiro, Alberto Camarero Orive, Francisco Javier González</p>	
<p>An educational innovation project: learn to communicate with maps</p> <p>Carmen Marín , Victor Cicuéndez, Mateo Pastrana, Alfonso Gómez, Cristina Velilla</p>		<p>AI for automated processes in cad: from the origins to the latest trends in the area and how to apply it in the cad lessons.</p> <p>Eva Rodríguez Hortelano, Maider Iturrondobeitia Ellacuria</p>	<p>Advanced design of non-pneumatic wheels for wheelchairs: simulation and manufacturing with 3d technologies</p> <p>Bernardo Pajares Moreno, María Moncho, Guillermo Peris, Ismael Lengua, Beatriz Defez, David Díaz upv, Valencia, España</p>	<p>Machine learning-based classification of public works using user positioning data from gnss correction services</p> <p>Francisco J Ramos-Sánchez, Cristian Nieto Pareja, Cristina Torrecillas</p>	
		<p>Design, modeling, and optimization of a biomechanical finger for a pediatric prosthetic hand</p> <p>Pablo Medina-Coello, Blas Salvador-Domínguez, Ignacio Diaz-Cano, Rogelio Del Pino Algarra, Arturo Morgado-Estevez</p>	<p>Transforming andalusia's industrial sector through eco-design: new timber construction systems for multy-storey buildings</p> <p>Antonio Jesús Rodríguez Pérez, Universidad de Granada, Granada, Spain</p>	<p>Tree volume calculation through in-field photogrammetry for estimating growth evolution</p> <p>Alejandro Rodríguez-Ortega, Beatriz Rey, Sergio Cubero, Ana Quiñones, Sandra Munera, Francisco Albert, Luis Taroncher, Jose Blasco, Nuria Aleixos</p>	
		<p>Digital twins models applied to cxl treatments of corneas affected with keratoconus.</p> <p>Jose González, Carmelo Gómez, Francisco Cavas</p>	<p>Design and implementation of a 3d-printed outlet cover for an open turbine in irrigation systems</p> <p>Antonio Garcia Chica, Julio Jose Caparroz Mancera, Angel Mariano Rodríguez Perez, Cesar Antonio Rodríguez González</p>	<p>Uncertainty of 3d modelling of an overhead power line using a geographic information system</p> <p>Laia Miravet Garret, Universidad de Málaga, Málaga, Spain</p>	
		<p>Discrepancies in corneal material parameter estimation: comparing tensile and inflation tests in biomechanical modeling</p> <p>José González Cabrero, Carmelo Gómez, Francisco Cavas</p>	<p>Mechanical characterization of compression-molded discontinuous carbon fiber/epoxy composites</p> <p>Javier Martín Domínguez, Patricia Mora Segado, Guillermo Plaza García, Universidad de Malaga, Málaga, Spain</p>		
		<p>Design of wearable telecare devices for older adults: emotional, social, and cognitive challenges</p> <p>Eva Tausiet, Roberto Casas, Teresa Blanco</p>	<p>Comparison of photosensitive resins and filaments for additive 3d printing of orthopedic devices</p> <p>Elena Arce, Rosa Devesa-Rey, Roi Paineira-Villar, Raquel Leirós-Rodríguez, Bibiana Trevissón-Redondo, Ana García-Diez</p>		

27th June 2025

Poster Session P03 9h - 14h [9:10h and 11:40h]*

* Authors are required to be present beside their poster at 9:10 AM and 11:40 AM

GRAPHICAL ENGINEERING IN SUPERIOR EDUCATION	METHODOLOGIES AND STRATEGIES BASED ON GRAPHICAL ENGINEERING	DIGITAL TOOLS AND ARTIFICIAL INTELLIGENCE	MANAGEMENT OF PRODUCTS AND PROCESSES	TOOLS AND METHODOLOGIES FOR MANAGEMENT AND ANALYSIS OF SPATIAL DATA	MISCELLANY
<p>Functional dimensioning based on a 3d nominal model</p> <p>M Ángeles Esandi-Baztan, Antonio Valin, Fernando Brusola</p> <p>Application of multiple simultaneous methodologies in the realisation of cad practices.</p> <p>Rocío Rodríguez, Rubén Rodríguez, Juan Fernández, Manuel Pablo Rubio, Pedro Hernández</p> <p>Support of 3d printing in the teaching of graphic expression subjects in engineering in engineering degrees</p> <p>Manuel Ignacio Bahamonde García</p>	<p>Topology optimization of the swingarm of a motorbike</p> <p>Xabier Amezua, Gaizka Erkizia, Haritz Uriarte, Mikel Iturrate, Olatz Etxaniz, Mikel Jauregi, Xabier Garikano, Eneko Solaberrieta</p> <p>1. University of the</p> <p>Meshing strategies for cfd simulations of lubricated mechanical components in open-source software</p> <p>Lorenzo Maccioni, Franco Concli</p> <p>Free University of Bozen-Bolzano, Bolzano, Italy</p>	<p>Innovation in digital health and assistance: from wearable devices to integrated care ecosystems</p> <p>Eva Tausiet, Alvaro Marco, Roberto Casas, Teresa Blanco</p> <p>Artificial intelligence in museums: an overview of facial expression analysis techniques in museum-space-visitor interaction</p> <p>Giusi Castaldo, Elena Laudante, Elidia Beatriz Blázquez-Parra, Enrique Dominguez Merino , Mario Buono</p> <p>Facial scanning protocol in preterm newborns for the manufacture of custom nasal masks</p> <p>Antonio Martín</p> <p>Hospital 12 de Octubre, Madrid, Spain</p> <p>Generative artificial intelligence applied to the parametric drawing of floor plans. origins, evolution and current state.</p> <p>Fernando Vilaplana</p> <p>Universidad de Sevilla, Sevilla, Spain</p> <p>Building a digital twin of the roman public works heritage in hispania</p> <p>Antonio Alfonso Arcos Álvarez, Ángela Moreno Bazán, Jesús María Alonso Trigueros, Salvador Senent Dominguez</p> <p>Designing digital twins for smart climate control in pig farming: applying iot and lora technology to modernize farm facilities</p> <p>Pablo Bosque, Miguel Ángel Torres, Ignacio Martínez, Jorge Sierra</p> <p>Remote identification of biofouling on submerged surfaces: image analysis and deep learning-based approaches</p> <p>Emmanuele Barberi, Maria Francesca Alberghina, Luciana Randazzo, Michela Ricca, Felice Sfravara</p> <p>Integrating AI and Voice Technology for Efficient Industrial Drawing Evaluation</p> <p>Ubierto-Artur, Pedro; Rollo-Sánchez, Cristina; García-Hernández, César.</p>	<p>Study of dimensional tolerances in additive manufacturing using commercial equipment</p> <p>Eduardo Vázquez López, Francisco Andrés Valderrama Gual, Jose ángel Sevillano Caraballo, Pablo Sánchez Jiménez</p> <p>Moving to organic goods and materials to reduce global warming potential emissions.</p> <p>Sara Barandiaran Oliveras, Ortzí Akizu-Gardoki, Cristina Peña Rodríguez, Rikardo Minguez, Erlantz Lizundia Fernández</p> <p>Optimising rheology and printability of a natural hydrogel for 3d bioprinting</p> <p>Alfonso Carlos Marcos Romero, David Picado Tejero, Laura Mendoza Cerezo, Juan Pablo Carrasco Amador, Jesús Manuel Rodríguez Rego</p> <p>University of Extremadura,</p> <p>Laura Mendoza Cerezo, Francisco De Asís Iñesta Vaquera, Juan Pablo Carrasco Amador, Alberto Moreno Becerro, Jesús Manuel Rodríguez Rego</p> <p>University of</p> <p>Francisco Jesús Moral García, Alfonso Carlos Marcos Romero, Jaime González Domínguez, Emiliano Pérez Hernández, Juan Carlos Gómez Blanco, José Blas Pagador Carrasco</p> <p>Design and manufacture of a device for the transport of biological material in 3d bioprinting</p> <p>Fernando Gómez-Hermosa, Lázuli Fernández-Lobato, M.Carmen Ladrón-De-Guevara-Muñoz, Yaiza López-Sánchez, Elidia Beatriz Blázquez-Parra</p> <p>A look at energy efficiency and sustainability in industrial agri-food projects through engineering graphics and eco-design</p> <p>Integration of graphic information with performance data to be used in built digital models</p> <p>Aitor Aragón Basabe, Amparo Verdu-Vazquez, Mercedes Valiente Lopez, Marcos García Alberti</p> <p>obtaining layout in a simple way</p> <p>Jose Luis González-Cespon</p> <p>Process of modeling a three-phase steam engine using 3dexperience student software</p> <p>Rafael Ortiz-Marín, María Gloria Del Río-Cidoncha, Francisco Javier Melero Morales, Alfonso Emilio Martínez-Del Rio</p>	<p>Landscape restoration of the murcian huerta: integration of the barraca as a prototype of minimal and sustainable housing</p> <p>Pedro Pina Ruiz, Tomas Gil Lopez, Amparo Verdu-Vazquez, Sebastian Alcaraz Garcia</p> <p>Using lidar to model 3d tree structures and to estimate tree metrics in almond crops</p> <p>Mateo Pastrana, Víctor Cicuéndez, Cristina Velilla, Carmen Marín, Alfonso Gómez</p> <p>Geometric analysis of san esteban church: new perspectives through 3d modeling</p> <p>Margarita Infante Perea, Gregorio Manuel Mora Vicente, Concepción Cantillana Merchante, José Carlos Galán Jiménez</p> <p>Preserving the legacy: sfm-based photogrammetric reconstruction of the industrial olive oil heritage at hacienda de quinto.</p> <p>Carmen Marín Buzón, Antonio Miguel Pérez Romero, Manuel José León Bonillo, Orly Enrique Apolo</p> <p>Gis-ahp based study of a power generation plant in the province of huelva (spain)</p> <p>José-Lázaro Amaro-Mellado, Gerard Paulet-Alòs</p> <p>Optimization of a uav lidar flight plan to maximize lidar beam reflections on the ground under canopy</p> <p>Juan José González-Quiñones, Juan Francisco Reinoso-Gordo, Francisco Javier Ariza-López, Manuel Antonio Ureña-Cámara</p>	<p>Design of an evolving cot convertible into a montessori bed</p> <p>Aída López López</p> <p>Universidad de Málaga, Málaga, Spain</p>