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Editorial

Advances in Engineering Graphics: Improvements and New Proposals

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Abstract: The study of graphic communication techniques that engineers, architects, and designers use to express ideas and concepts, or the graphic expression applied to the design process, is becoming increasingly important. The correct interpretation of graphic language allows the development of skills in the training of an engineer or architect. For this reason, research on this topic is especially valuable in finding improvements or new proposals that help toward a better understanding of those techniques. This Special Issue shows the reader some examples of different disciplines available, such as engineering graphics, industrial design, geometric modeling, computer-aided design, descriptive geometry, architectural graphics and computer animation.

Keywords: engineering graphics; computer-aided design; geometric modeling; industrial design; descriptive geometry; architectural graphics; computer animation

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1. Introduction

The study of engineering graphics, defined as the set of graphic communication techniques that engineers, architects, and designers use to express ideas and concepts, or the graphic expression applied to the design process, is becoming increasingly important.

Not surprisingly, engineering and architecture studies have one of their main functions in the teaching of graphic communication, since it is the universal language of the engineer, architect, or designer in engineering and/or architecture fields.

The correct interpretation of graphic language allows the development of skills in the training of an engineer or architect. For this reason, research on this topic is especially valuable in finding improvements or new proposals that help toward a better understanding of those techniques.

The scope for case studies is very broad and can cover different disciplines of engineering, such as mechanical engineering, civil engineering, chemical engineering, electrical and electronic engineering, automation and robotic engineering or telecommunications engineering, among others, as well as architecture. In particular, research on educational aspects of the teaching of graphic communication techniques, which improve the development of skills related to the fields of engineering and architecture, is especially welcome.

This Special Issue invites researchers to submit original research papers and review articles related to any discipline in which theoretical or practical issues of engineering graphics are considered. The topics of interest include but are not limited to:

- Engineering graphics
- Computer-aided design
- Industrial design
- Industrial drawing
- Geometric modeling
- Virtual reality
- Augmented reality
- Technical drawing

- Descriptive geometry
- Architectural graphics
- Computer animation
- Multimedia

2. Statistics of the Special Issue

The statistics of the call for papers for this Special Issue, related to published or rejected items, are as follows: total submissions, 17; published, 11 (65%); rejected, 6 (35%).

The authors' geographical distribution by country for published papers is shown in Table 1, where it is possible to observe 30 authors from three different countries. Note that it is usual for an article to be signed by more than one author and for authors to collaborate with others at different affiliations.

Table 1. Geographic distribution by the country of author.

Country	Number of Authors
Spain	23
Korea	5
Taiwan	2
Total	30

3. Authors of this Special Issue

The authors of this Special Issue and their main affiliations are summarized in Table 2, where there are three authors on average per manuscript.

Table 2. Affiliations and bibliometric indicators for the authors.

Author	Main Affiliation	Reference
Manuel Prado-Velasco	University of Seville	[1]
Rafael Ortíz-Marín	University of Seville	[1]
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Table 2. *Cont.*

Author	Main Affiliation	Reference
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4. Brief Overview of the Contributions to This Special Issue

The analysis of the topics (Table 3) identifies or summarizes the research undertaken. This section classifies the manuscripts according to the topics proposed in the Special Issue. It was observed that seven topics include all submissions: engineering graphics, computer-aided design, industrial design, geometric modeling, descriptive geometry, architectural graphics and computer animation.

Table 3. Topic analysis.

Topic	Number of Manuscripts
Industrial Design	3
Geometric Modeling	2
Computer Animation	2
Engineering Graphics	1
Computer-Aided Design	1
Descriptive Geometry	1
Architectural Graphics	1
Total	11

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