



# COMPUTER-AIDED DESIGN

## AUTHOR INFORMATION PACK

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### DESCRIPTION

*Computer-Aided Design* is a leading international journal that provides academia and industry with key papers on research and developments in the application of **computers** to **design**.

*Computer-Aided Design* invites papers reporting new research, as well as novel or particularly significant applications, within a wide range of topics, spanning all stages of design process from concept creation to manufacture and beyond. Examples of relevant topics include but are not limited to:

- Foundational theories, frameworks, methodologies, and standards
- Geometric and topological methods for shape and solid modeling
- Structural, material and physical modeling
- Virtual reality and prototyping methods
- Advanced support of manufacturing and downstream activities of product realization
- User interfaces, system interfaces and system interoperability
- Knowledge-intensive technologies for design
- Design databases, knowledge repositories, object libraries and retrieval
- Modeling and design of multi-scale objects and systems
- Specific applications and significant benchmarks of computer-aided design
- Emergent issues of advanced design support
- Uncertainty and imprecision in computer-aided design

Contributions are welcome from all disciplines, provided that they have a significant geometric, topological, spatial, or configuration design content, and present developments likely to be of interest to a broad spectrum of researchers, educators, and practitioners of **computer-aided design**.

Types of Papers:

Research papers: will report significant research and development results, describe the relevant theoretical foundations and the methodology, and present workable algorithms and give examples taken from real world applications, stressing the significance of the approach being presented.

Application papers: will describe complex and pioneering applications of CAD concepts, methods and tools in practice, present significant results that extend the disciplinary knowledge and/or analyze the application in a way that is likely to stimulate and influence further research.

Survey papers: will critically analyze the current state of knowledge in a given field of CAD, summarize and organize recent research results in a novel way, derive new insights and add understanding to working in the field, and propose possible topics, orientations and approaches for future research and development.

Technical notes: will respond to material published in the journal or closely related topics, repair a flaw in the definition and approach or stimulate further thinking, or provide additional technical details on a CAD theory, technology, methodology, product or application.

## AUDIENCE

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Mechanical, Electrical/Electronic, Civil Structural, Marine, Computer and Chemical Engineers; Architects; all industrial users of CAD systems; CAD vendors; academics.

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## GUIDE FOR AUTHORS

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Application papers contain new analyses of CAD techniques in practice, presenting authoritative results in a way that is likely to stimulate and influence research.

Review papers give genuine insight into specific areas of CAD research and development.

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