Instructions and Style Guide for Authors Submitting Full and Work in Progress Papers to the ACADIA 2021 Conference

Abstract

This document contains instructions and guides for preparing Full Paper (4000 words excluding references and captions) or work in progress papers (2000 words excluding references and captions) submissions for peer review and acceptance to the 2021 ACADIA Conference. Authors should use this Word document and the information contained within it for the formatting of their submissions by making use of the ACADIA Word styles provided by this guide.

**Keywords:** This section should contain maximum 5 words separated by commas

1. Introduction

Papers will be double blind peer reviewed. Accepted authors will be invited to submit a final version of their paper for the conference proceedings.

Papers should be written in US English, using straight-forward jargon-free terminology. The work must be an original contribution to the body of knowledge relative to the field of computational design, and not duplicative or re-published. An individual can only be lead author on one paper submission (this does not include project and field notes submissions). Please refer to ACADIA’s Publication Ethics Guidelines for detailed policies regarding academic writing, originality, plagiarism, intellectual property, and the peer review process:

<http://acadia.org/content/conferences#publication_ethics>

1. Formatting

Papers should be organized with a clear content-oriented structure. Every paper must have a title and several headings. References follow at the end of the document. Graphics and tables should be embedded into the text. Please only use one space after the period at the end of a sentence. Adhering to the styles outlined in this guide will enable more streamlined conversion to the InDesign templates for publication.

1. Fonts and Spacing

Body text should be set using the ACADIA-Normal style (Times New Roman, 12 pt), which provides 6 pt spacing after paragraphs. Paragraphs should not be indented. Emphasis within the text, such as words to be defined or key phrases, should be italicized. Bulleted lists may be used (style: ACADIA-Bulleted List), with a simple dot for a bullet. Numbered lists may be used; we prefer Arabic numbers set off by a close parenthesis. Use only one Carriage Return/Line Feed after a paragraph. Do not insert any empty lines between paragraphs.

Headings should be capitalized. They should be sized and spaced as follows:

* Title: Use the ACADIA-Title style (14 pt, bold, 12 pt spacing before the heading and 48 pt after, centered).
* Header A: Use the ACADIA-Header A Numbered style (12 pt, bold, 6 pt spacing before the heading and 6 pt after).
* Header B: Use the ACADIA-Header B Numbered style (12 pt, 0 pt spacing before the heading and 6 pt after).

Headings should be numbered, except for Abstract and References, which use the ACADIA-Header A Not-Numbered style.

1. Margins and Layout

Your text should be laid out for 8 ½" x 11" paper. Margins should be 1" top, bottom and sides. Text should be justified.

A footer placed 1" from the bottom edge should identify the title of the paper and the page number. Its font should be Times New Roman or similar, 12 pt, italic. The footer is set off from the body by a single ruled line.

1. Content

Text should be organized clearly according to technical writing conventions. **IMPORTANT: For this submission, omit all identifying names, places, programs, institutions and firms from the paper to maintain an anonymous review process. Failure to do so will have the paper returned to the corresponding author, rejected from submission.**

Full Papers describe work that is embedded within significant bodies of research or creative practice. A Full Paper is categorized by research-based projects, design processes, and/or novel techniques and methods which contribute to the advancement of the field of computational design. Papers must be concise and follow the structure of a scientific paper providing: Abstract, Introduction, Background, Methods, Results and Reflection, and Conclusion. Full Papers must emphasize the significance of the work and its historical and/or theoretical context. Full Papers may also be entirely historical or theoretical in nature. Full Papers should be no longer than 4,000 words, excluding the abstract, captions and endnotes. Low-resolution images and captions should be embedded in the paper.

Work in Progress Papers describe developing work or an individual project which has yet to be placed within a larger context of on-going research. A Work in Progress paper is categorized by a novel project, method and/or design approach which has the potential to contribute to the advancement of the field of computational design. Papers should adhere to the following structure: Introduction (including brief description of background and precedents), Methods, Results, and Conclusion (including a reflection upon future development and potential contribution to the field). Work in Progress Papers should be no longer than 2,000 words, excluding the abstract, captions and endnotes. Low-resolution images and captions should be embedded in the paper.

* 1. Sections

**\*\*\* This section contains the structure expected for technical papers. Please adjust structure and headings to fit your paper style (theoretical, historical, technical...etc. \*\*\***

In the **Abstract** section of the paper, the position of the work in terms of contributing a theoretical approach, computational method or fabrication technique (or combinations of these) should be clearly and concisely stated. The results of the research and major contributions should be briefly stated. The abstract should be a maximum of 250 words.

In the **Introduction** section of the paper, the objectives and the hypothesis of the work are to be stated and placed within the current context. This section should include the motivation for the research and a high-level contextualisation within the general field of research.

In the **State of the Art** section a thorough contextualisation within existing research should be made. The section can reflect the author's previous work but should also cite original sources that led to the development of their specific body of work. It is expected that a Work in Progress Paper will have a more condensed description of precedent and background work, consolidated into the Introduction section. Proper references to journal articles and/or conference papers must be used when describing the precedent work.

In the **Methods** section, the novel techniques developed in the work should be introduced and described so that they can be understood and reproduced by someone in the field of computational design and digital fabrication.

For the **Results and Discussion**, the outcome of the work should be clearly described and depicted. The author's work should be placed in the context of computational design and its contribution to previously cited work must be indicated. It is expected that a Work in Progress Paper will focus more on the discrete outcomes of the work, over its larger implications to the field of computational design. Authors must provide a critical summation of their research offering successes and failures in relation to the original hypothesis.

The **Conclusion** section should describe the future development of the work and provide a reasonable outlook of the research into future applications. Such propositions should be grounded in the precedents that were originally stated in the hypothesis for the research.

While an **Acknowledgement** section should **not** be included in the paper submission, any accepted papers that are published in the Proceedings will require the author to properly attribute and credit teams, contributors, faculty, academic programs, funding bodies, etc.

Appendices may be used to provide lengthy sections of code, examples of survey forms, or other useful adjuncts to the discussion.

* 1. Figures

Figures include line drawings, charts, photographs and digital imagery. Low-resolution images and captions should be embedded in text. However, resolution should be high enough that any text that is part of the image is legible.

The figure must be placed after it is mentioned in the text. Leave an empty line above the figure but *no* empty line below the figure caption. All figures must be mentioned in the text (Figure 1). Captions are to be located *below* the figure, using the *ACADIA-Figure Caption* style.



Figure 1. Jack-Knife PDA Design.

* 1. Tables

Place tables within the body of the text, in the paragraph after they are first mentioned. They should not be at the end of the document.

A smaller typeface may be used for tables (9 or 10 point font) than in the text. Use the same type size for all the tables in the document. An *ACADIA-Table Caption* style is provided in the template.

Put the table number and caption on the line *above* the table, left justified, with a capital letter for the first word only. Leave one blank line between the text above the caption, and one below the table, before the text continues. The caption should be boldfaced.

Table 4: Example of a correct layout of a simple table.

|  |  |  |  |
| --- | --- | --- | --- |
| Building Number | Total Area (square feet) | Core Area (square feet) | Vertical Circulation |
|  |  |  | Stairwells | Elevators |
| 1 | 20,000 | 5,000 | 2 | 1 |
| 2 | 40,000 | 3000 | 2 | 1 |
| 3 | 1,200,000 | 12,000 | 6 | 6 |

* 1. Identification and Credits

For the review submission, ensure that the document is free of any identifying names, places, programs, institutions and firms from the paper to maintain an anonymous review process.

* 1. Citations

References are cited in the text by author name and the date of publication, enclosed in parentheses. The citation is placed at the end of the sentence. Here are examples of citations as they would appear embedded into the text:

* One author: (Legrand 1994)
* Two authors: (Vanier and Lacasse 1996)
* Four or more authors: (Bazant et al. 1993)
* Two works by same author in same year: (Lacasse 1998a, 1998b)
* Several works by same author in different years: (Vanier 1996, 1998)
* Several works by different authors: (Bazant et al. 1993; Legrand 1994)

Software citation: the Chicago Manual includes instructions for citing software, and we remind all authors of the requirement to cite the intellectual work of our peers in the development of the software tools used in research. To facilitate compliance, please refer to the guides on the websites listed below. This list is not intended to be exhaustive, and where questions arise, the rules of the Chicago Manual take precedence.

<https://www.bibguru.com/g/chicago-software-citation/> <https://uark.libguides.com/CSCE/CitingCode>

<https://libguides.nps.edu/citation/chicago-nb#computer-program>

1. Use of Gendered Pronouns

Avoid using gendered pronouns unless explicitly referring to a specific person. Additionally, avoid using gendered language when referring to professions and practices; for example: o gendered pronouns ("he," "she," "he/she") may be replaced with the gender-neutral pronoun "they" and gendered professional titles and practices (i.e. "craftsman," "craftsmanship" and "chairman") may be replaced with a gender-neutral equivalent (i.e. "craftsperson," "craftspeople," "craft" and "chair" or "chairperson").

1. Submitting Your Manuscript

Reference the information on the ACADIA Conference website for details regarding the submission process: <http://2021.acadia.org/submit/>

1. Conclusions

Authors who follow these conventions will allow the reviewers to concentrate on the content of the paper rather than the formatting.

*Some of the content of these guidelines is based upon a document distributed by Dr. Michael A. Lacasse and Gerry Neville of the National Research Council and National Research Council Research Press.*

References

Include References at the end of the document. **Do not use footnotes**. Only texts that are cited in the paper should be included in the References. All works that are cited should be included in the References section. Use the *ACADIA-Reference* style to format your reference entries. The following format, based upon the [Chicago Manual of Style](http://www.chicagomanualofstyle.org/tools_citationguide.html), 16th Edition, Author-Date format, is to be used:

*Book*

Fox, Michael and Miles Kemp. 2009. Interactive Architecture. New York: Princeton Architectural Press.

*Book Chapter*

Hasdell, Peter. 2009. “Pneuma: An Indeterminate Architecture, or Toward a Soft and Weedy Architecture.” In *Design Ecologies: Sustainable Potentials in Architecture*, ed. L. Tilder and B. Bolstein. New York: Princeton Architectural Press. 92-113.

*Journal Article*

Brooks, Rodney A. 1990. “Elephants Don’t Play Chess.” *Robotics and Autonomous Systems* 6 (1): 3–15.

*Conference Paper*

Cremers, Jan. 2011. “Energy Saving Design of Membrane Building Envelope.” In *International Conference on Textile Composites and Inflatable Structures: Structural Membranes 2011*, ed. E. Oñate, B. Kröplin and K.-U.Bletzinger. 148–155. Barcelona: CIMNE.

Wu, Kaicong and Axel Kilian. 2018. “Robotic Equilibrium: Scaffoldfree Arch Assemblies.” In *ACADIA 2019: Recalibration: On Imprecision and Infidelity. Proceedings of the 38th Annual Conference of the Association for Computer Aided Design in Architecture (ACADIA)*, ed. P. Anzalone, M. del Signore and A. J. Wit. 342–349. Mexico City: ACADIA.