

Formatting Instructions for Advances in Cognitive Systems



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Abstract

Keep your abstract brief, limiting it to one paragraph and to fewer than ten sentences. The abstract should begin 0.35 inches (0.9 cm) below the final address. The heading ‘Abstract’ should be centered, bold, and in 12 point type. The abstract body should use 10 point type and should be indented 0.25 inches (0.635 cm) more than normal on left-hand and right-hand margins. Insert about 0.3 inches (0.762 cm) of blank space after the body.

1. Format of the Paper

All submissions should follow the same format to ensure that the printers can reproduce them without problems and to let readers more easily find the information that they desire.

* 1. Paper Dimensions

The text of the paper should be formatted in one column, with an overall width of 6.0 inches (15.24 cm) and length of 8.0 inches (20.32 cm). The left margin should be 1.25 inches (3.175 cm) and the top margin 1.5 inches (3.81 cm). The right and bottom margins will depend on whether you print on US letter or A4 paper.

The paper body should be set in 11 point type with a vertical spacing of 12 points (13.5 points for .docx or .doc formats). Please use Times Roman typeface throughout the text.

* 1. Title and Author Information

The paper title should be set in 14 point bold type and centered between two horizontal rules that are 1 point thick, with 1.5 inches between the top rule and the top edge of the page. Capitalize the first letter of each content word and put the rest of the title in lower case.

Author information should start 0.3 inches (0.762 cm) below the bottom rule surrounding the title. The authors’ names should appear in 11 point bold type, electronic mail addresses in 11 point small capitals, and physical addresses in ordinary 11 point type.

Each author’s name should be flush left, whereas the email address should be flush right on the same line. The author’s physical address should appear flush left on the ensuing line, on a single line if possible. If successive authors have the same affiliation and address, then give this information only once for them.

* 1. Partitioning the Text

You should organize your paper into sections and paragraphs to help readers place a structure on the material and understand its contributions.

* + 1. Sections and Subsections

Section headings should be numbered, flush left, and set in 12 point bold type with the content words capitalized. Leave about 0.25 inches (0.635 cm) of space before the heading and approximately 0.15 inches (0.33 cm) after the heading.

Similarly, subsection headings should be numbered, flush left, and set in 11 point bold type with the content words capitalized. Leave approximately 0.2 inches (0.51 cm) of space before the heading and 0.13 inches (0.33 cm) afterward.

Finally, subsubsection headings should be numbered, flush left, and set in 11 point italics with the content words beginning with capitals. Leave about 0.18 inches (0.457 cm) of space before the heading and about 0.1 inches (0.254 cm) after the heading. Please use no more than three levels of headings in a paper.

* + 1. Paragraphs, Quotations, and Footnotes

Within each section or subsection, you should further partition the paper into paragraphs. You should not indent the first line of a section or subsection’s initial paragraph, but you should indent successive paragraphs by 0.25 inches (0.635 cm). There should be no extra spacing between paragraphs within a section.

You may want to quote an excerpt of relevant text that appears in the published work of some other authors:

Such a quotation should begin 0.25 inches (0.635 cm) below the preceding line of regular text and end 0.25 inches (0.635 cm) before it begins again. The left and right margins should be 0.35 inches (0.889 cm) larger than for regular text, but the quoted text should have the same font as regular text, with a vertical spacing of 12 points.

You should remember to cite the source of the quotation, and you should close off each quotation with some regular text, which should not be indented.

You can use footnotes[[1]](#footnote-1) to provide readers with additional information about a topic without interrupting the flow of the paper. Indicate footnotes with a number in the text where the point is most relevant. Place the footnote in 10 point type (9 point type for .docx or .doc formats) at the bottom of the page on which it appears. Precede the first footnote on a page with a horizontal rule of 2.0 inches (5.08 cm) to separate it from the main text.[[2]](#footnote-2)

* + 1. Itemized and Enumerated Lists

*Figure 1*. Modules in the ICARUS Architecture and their cascaded organization.

When you have a number of related but distinct points, you may want to organize them in an itemized list that:

* begins 0.15 inches (0.381 cm) below the preceding line of regular text and ends 0.15 inches (0.381 cm) before the regular text begins;
* uses a left margin for each item that is 0.25 inches (0.635 cm) to the right of the left margin for regular text;
* includes a bullet at the beginning of the first line of each item, separated from the item's text by 0.075 inches (0.19 cm); and
* uses a vertical spacing of 12 points for lines within each item and separates successive items by the same amount.

In general, you should close off an itemized list with some sentences of regular text, which should not be indented. In some cases, you may instead want to use an enumerated list that replaces the bullets with numbers.

* 1. Figures

You may want to include figures in the paper to help readers visualize your approach and your results. Such artwork should be centered, legible, and separated from the text. Lines should be dark and at least 0.5 points thick for clear display and printing, and the text should not appear on a dark background.

Label all distinct components of each figure. If the figure takes the form of a graph, then give a name for each axis and include a legend that briefly describes each curve. However, do *not* include a title above the figure, as the caption already serves this function.

Number figures sequentially, placing the figure number and caption *after* the graphics, with at least 0.2 inches (0.508 cm) of space before the caption and 0.3 inches (0.762 cm) after it, as in Figure *2*1. The figure caption should be set in 10 point type and centered unless it runs two or more lines, in which case it should be flush left. You may float a figure to the top or bottom of a page, but ideally it should appear on the page that first mentions it or on the page immediately afterward.

*Figure 2*. Modules in the ICARUS Architecture and their cascaded organization.

*Table 1*. Adequacy of four models of learning in problem solving in terms of whether they account (⊕), fail to account (∅), or partially account (⊙) for phenomena from VanLehn (1989) [\*] and Jones (1989) [◊].

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|  | ACT-R | Soar | EUREKA | DAEDALUS |
| Means-ends analysis◊ | ⊙ | ⊕ | ⊕ | ⊕ |
| Nonsystematicity◊ | ∅ | ∅ | ⊕ | ∅ |
| Problem isomorphs\* | ⊙ | ⊙ | ⊙ | ⊙ |
| Reduced search\* | ⊕ | ⊕ | ⊕ | ⊕ |
| Asymmetrical transfer\* | ⊕ | ⊕ | ⊕ | ⊕ |
| Einstellung effects\* | ⊕ | ⊕ | ⊕ | ⊕ |
| Reduced verbalization\* | ⊕ | ⊕ | ∅ | ∅ |
| Reduced verbalization\* | ⊕ | ⊕ | ∅ | ∅ |
| Rare analogies\* | ∅ | ∅ | ⊙ | ⊙ |
| Superficial analogies\* | ∅ | ∅ | ⊕ | ⊕ |

* 1. Tables

You may also want to include tables that summarize material. Like figures, these should be centered, legible, and numbered consecutively. However, place the title *above* the table with at least 0.1 inches (0.254 cm) of space before the title and the same after it, as in Table 1. The table title should be set in 11 point type and centered unless it runs two or more lines, in which case it should be flush left.

Tables contain textual material that can be typeset, as contrasted with figures, which contain graphical material that must be drawn. Specify the contents of each column in the table’s topmost row. Again, you may float a table to the top or bottom of a page, but attempt to place each table on the page that first mentions it or on the one immediately afterward.

* 1. Citations and References

Please use APA reference format regardless of your formatter or word processor. If you rely on the L**A**T**E**X bibliographic facility, use the files cogsysapa.sty and cogsysapa.bst, which are available on the Web site, to obtain this format. These require you to place your references in a separate file with a bib extension, as explained in the L**A**T**E**X manual.

Citations within the text should include the authors’ last names and year. If the authors’ names are included as part of the sentence, place only the year in parentheses, as in Jones and VanLehn (1994), but otherwise place the entire reference in parentheses with the authors and year separated by a comma (Jones & VanLehn, 1984). List multiple references alphabetically and separate them by semicolons (Laird, Rosenbloom, & Newell, 1984; Newell & Simon, 1972). Use the ‘et al.’ construction only for citations with three or more authors, and list all authors to a publication in the first citation of it.

Use an unnumbered first-level section heading for the references, and use a hanging indent style, with the first line of the reference flush against the left margin and subsequent lines indented by 10 points. The references at the end of this paper include examples for journal articles (Forbus, 1984), conference publications (Laird, Rosenbloom, & Newell, 1984), book chapters (VanLehn, 1989), books (Newell & Simon, 1972), edited volumes (Shrager & Langley, 1990), technical reports (Shapiro et al., 2004), and dissertations (Choi, 2010).

Alphabetize references in both the text and at its end by the surnames of the first authors, with single author entries preceding multiple author entries. Order references for the same authors by year of publication, with the earliest first.

1. Electronic Formatting and Submission

*Advances in Cognitive Systems* will rely on electronic submission of papers for review and publication. We assume that nearly all authors will have access to L**A**T**E**X or Word to format their documents and can use a Web browser to download style files and upload their papers. Authors who do not have such access should send email with their concerns to *acs@cogsys.org*.

* 1. Paper Length and Format

The title *Advances in Cognitive Systems* is associated with both an electronic journal and an annual conference, with many of the articles appearing in the former having been submitted and reviewed under the auspices of the latter.

Papers submitted to the annual conference must not exceed sixteen (16) pages, including all figures, tables, and references. We will return to the authors any submissions that exceed this page limit or that diverge significantly from the format specified herein. Papers submitted for publication in the journal but not for presentation at the meeting are not subject to this constraint, but we encourage authors to keep the body of such papers to at most twenty (20) pages.

Submissions may be accompanied by online appendices that contain data, demonstrations, instructions for obtaining source code, or the source code itself. We encourage authors to include such appendices when they submit papers. This material will not count in a submission's length.

Electronic templates for producing the camera-ready copy are available for L**A**T**E**X and Microsoft Word. Style files and sample papers are available on the Web at:

http://www.cogsys.org/format/ .

Authors who have questions about these electronic formats should send them to *acs@cogsys.org*.

To ensure the ability to preview and print submissions, authors must provide their manuscripts in pdf format. Papers prepared in Word should be saved as pdf files and submitted in this format. To support the review process, each submission must be accompanied by information about the paper’s title and abstract, as well as the authors’ names and physical addresses.

* 1. Submitting Initial and Final Papers

Submission of initial and final papers will take place in a purely electronic manner through the World Wide Web. Authors who intend to submit a paper for presentation at the annual conference should upload their file to the submission repository at

http://www.cogsys.org/submit/ .

Submission should be completed no later than 11:59 PM Pacific time on the conference due date, which will be stated clearly on the meeting Web site. If a submission is late, then it will not be considered for inclusion at the meeting.

*Advances in Cognitive Systems* will also consider papers that are not intended for presentation at the annual conference. Authors who wish to submit papers of this sort should upload their file to the submission repository at

http://www.cogsys.org/journal/submit/ .

Such submissions may occur at any time, unless they are related to special issues of the journal, which will have their own deadlines.

Final versions of papers accepted for publication, and resubmissions of conditionally accepted papers, should follow the same format as that for initial submissions, and should be uploaded to the same Web repository as used for the originals. For the annual conference, final versions should be deposited no later than 11:59 PM Pacific time on the due date. Authors of late submissions will not be provided with a slot to present their work at the meeting and their papers will not appear in the journal. Papers not related to the conference may be uploaded at any time.

In both cases, papers that have been conditionally accepted will be examined for compliance with conditions placed on their acceptance. Final papers must follow the content, format, and length restrictions that are specified in these instructions.

Acknowledgements

Please place your acknowledgements in an unnumbered section at the end of the paper. Typically, this will include thanks to reviewers who gave useful comments, to colleagues who contributed to the ideas, and to funding agencies or corporate sponsors that provided financial support.

References

Choi, D. (2010). *Coordinated execution and goal management in a reactive cognitive architec-ture.* Doctoral dissertation, Department of Aeronautics and Astronautics, Stanford University, Stanford, CA.

Forbus, K. D. (1984). Qualitative process theory. *Artificial Intelligence*, *24*, 85–168.

Laird, J. E., Rosenbloom, P. S., & Newell, A. (1984). Towards chunking as a general learning mechanism. *Proceedings of the Fourth National Conference on Artificial Intelligence* (pp. 188–192). Austin, TX: Morgan Kaufmann.

Newell, A., & Simon, H. A. (1972). *Human problem solving*. Englewood Cliffs, NJ: Prentice-Hall.

Shapiro, D., Billman, D., Marker, M., & Langley, P. (2004). *A human-centered approach to monitoring complex dynamic systems* (Technical Report). Institute for the Study of Learning and Expertise, Palo Alto, CA.

Shrager, J., & Langley, P. (Eds.) (1990). *Computational models of scientific discovery and theory formation*. San Mateo, CA: Morgan Kaufmann.

VanLehn, K. (1989). Problem solving and cognitive skill acquisition. In M. I. Posner (Ed.), *Foundations of cognitive science*. Cambridge, MA: MIT Press.

1. For the sake of readability, footnotes should be complete sentences. [↑](#footnote-ref-1)
2. Multiple footnotes can appear on each page, in the same order as they appear in the text, but spread them across pages if possible. [↑](#footnote-ref-2)