How to Format Your Paper for the Genetic Programming 1996 Conference (GP-96)

John R. Koza
Computer Science Dept.
258 Gates Building
Stanford University
Stanford, California 94305
koza@cs.stanford.edu

John Q. Smith
Computer Science Dept.
999 Gates Building
Stanford University
Stanford, California 94305
smith@cs.stanford.edu

John A. Doe
Computer Science Dept.
999 Gates Building
Stanford University
Stanford, California 94305
doe@cs.stanford.edu

ABSTRACT

This document provides instructions for preparing the required TWO camera-ready copies of VERY-HIGH-QUALITY of your accepted paper for the Genetic Programming 1996 Conference (GP-96) and sending them to ARRIVE at AAAI offices by FRIDAY APRIL 12, 1996 along with a signed copyright transfer ("Permission to Publish") form This document provides instructions and examples for all the major components of your paper. When you are finished, your final camera-ready paper should end up looking very much like this document.

1. Introduction

Congratulations on acceptance of your paper.

Begin by carefully considering the comments of your peer reviewers and revising your paper accordingly.

Most authors find that when they revisit a paper that they wrote several months earlier, they spot errors and omissions and opportunities to improve their paper. Also, it is always very desirable to enlist other people to read the final version of your paper. Such people will often spot gaffes, blind spots, and unclear explanations that the author will miss.

Be especially alert to reviewer comments (even ones that may initially appear to you to be inartfully worded or incorrect) since they sometimes reflect confusion caused by a lack of clarity in your paper.

The conference proceedings are going to be photographed using a lithographic printing process. Your paper is not going to be typeset and is not going to be checked by a copy editor for errors. You are not going to get to see galley proofs or get any further chance to revise your paper. What the reader sees in the proceedings book will be a photographic reproduction of the camera-ready copy that you supply. The only things that the publisher is going to add to your paper are page numbers (running consecutively through the entire book) and a running head.

2. The Live Printing Area

The live printing area is 7" (178 mm) wide by 9 1/4" (235 mm) high for each page.

On 8 1/2" by 11" American-style paper,

• Left margin – 0.75 inch (19 mm)
• Right margin – 0.75 inch (19 mm)
• Top margin – 1.0 inch (25 mm)
• Bottom margin – 0.75 inch (19 mm)

These margins leave a live printing area that is 7" wide (on 8 1/2" wide paper) and that is 9 1/4" high (on 11" high paper).

This live printing area of 7" by 9 1/4" is *inviolate*. This area is designed to provide for tolerances in the printing process, space for the publisher to add the page numbers and running heads, and sufficient to allow the book to be opened and your paper to be read after the book is bound. Your paper will be rejected if anything drifts outside this live printing area. There are no exceptions.

You may use European-size A4 (21 x 30 cm) paper. If you do, arrange the page so that the live printing area remains at 7" wide and 9 1/4" high. Also, be sure to maintain the 3/4" *left* margin and the 1" *top* margin (at the expense of the right margin and the bottom margin). People with non-American style publishing systems may find it useful to know that a "point" is 1/72 inch. (One inch = 2.54 cm.) Thus, 10-point type is 10/72 inch high. Space, called "leading", is also needed between lines of type. For 10-point type, the leading is typically 1 or 2 points.

3. The Two-Column Layout

The basic column layout of the paper is two columns. There are two 3.375" (86 mm) columns separated by a 0.25 inch (6 mm) gap between the two columns (for a total of 7" total width).

On 8 1/2" by 11" American-style paper, each column has

• Column Width – 3.375 inch (86 mm)
• Gap between the two columns - 0.25 inch (6 mm)
• Column Height – 9.25 inch (235 mm)

There are one or two places in your paper where a one-column arrangement is used. These are (1) the paper's title, author's name, author's affiliation, and author's address (which are centered within the full 7" width at the top of the first page), and (2) large-sized figures or tables (that may occupy the full 7" width).

Do not introduce any other column arrangements to your paper. Do not create any odd-sized figures or tables or "flow" text around figures or tables.

4. Type Font

The basic type font for the paper is 10-point Times font. Use 1 or 2 points of leading. The first paragraph after a heading should not be indented (i.e., like this paragraph).

Thereafter, indent each new paragraph by about 0.175" (44 cm) (i.e., like this paragraph).

If the Times font is not available, you may use any similar easily read font, but do not use a fixed-spacing "typewriter style" font such as Courier for the body of the paper.

5. Title and Author Information

The title of the paper appears at the top of the first page and runs across the entire width of the page. The title is in 18-point **bold** Times font and is centered.

On European-size A4 paper, center the title 4 1/4 inches (108 mm) from the *left* edge of the page.

The author's name is to be in 14-point **bold** Times font and is centered.

The author's affiliation and address is to be in 12-point **non-bold** Times font and is centered under the author's name.

To enable people to contact you about your work, include a complete mailing address (including the ZIP or postal code). Include your e-mail address. If you like, also include the URL of your WWW home page.

Leave a 1/4" gap after the bottom of the author information in order to separate the beginning of the abstract (i.e., the word "ABSTRACT") and the beginning of the second column.

The title, author names, and author address information should total no more than about 2" (i.e., the word "ABSTRACT" should be about 3" from top of the page).

It is advisable to include the words "genetic programming," "genetic algorithm," "classifier system," or "evolutionary programming" in the title of your paper. While this adds little or nothing for attendees of this conference, it provides helpful information to a reader when your paper is subsequently cited.

6. The Abstract

The abstract of a paper appears at the beginning of the first column on the first page of the paper. The abstract is in 12-point bold Times font and is right-and-left-justified. The abstract is indented 0.25 inch (6 mm) at both the left and right with respect to the 3.375 inch (86 mm) wide columns of the main body of the paper.

The word "ABSTRACT" appears in capitals in 12-point bold Times font, centered above the abstract.

Leave 1/4" after the abstract to separate it from the beginning of the paper.

The abstract consists of 50 - 150 words. Its purpose is to summarize what is actually contained in the paper (not to provide motivational, augmentative, or bibliographic information of the type that belongs in the paper itself).

7. First-Level Section Headings

First-level section headings (like the heading for this section) are to be in 14-point bold Times font with 8 points of leading before and 4 points of leading after. When you number your sections, these sections acquire numbers such as 1.0, 2.0, etc.

The two special headings "Acknowledgements" and "Bibliography" (described later) are the same as first-level section headings, except that they are unnumbered.

7.1. Second-Level Headings

Second-level section headings (like the heading for this section) are to be in 10-point bold Times font with 4 points of leading before and 2 points of leading after. When you number your sections, these sections acquire numbers such as 1.1, 1.2, 1.3, etc.

7.1.1 Third-Level Headings

The basic point about third-level section headings (like the heading for this section) is that you don't need them in a short paper. However, if you insist of having them, they can be in 10-point bold italics Times font with 4 points of leading before and 2 points of leading after.

8. Tables

Most papers have tables and figures. Tables are different from figures in that they consist only of text. The tableau that appears in many papers on genetic programming is an example of a table.

Tables are numbered consecutively in the paper (using a sequence distinct from the numbering of figures). A legend appears above each table in bold 10-point left-and-right-justified Times font (with 4 points of leading beforehand (to separate the table's legend from the preceding text).

Table 1 shows the first three integers in alphabetic order along with their decimal equivalents.

Table 1 The first three integers in alphabetic order.

Name	Decimal Equivalent
One	1
Three	3
Two	2

Do not shade areas within the table in gray. This fancy highlighting may, or may not, reproduce well when your paper is photographed and may make the information in your table unreadable. Tables should be entirely black and white.

Tables must either fit in-line within one column (3.375") or occupy the full 7" width of the page. Do not use any odd-sized tables. Do not flow text around tables.

Do not let the table or its legend run outside the 3.375" width of the column for in-line tables (or outside the 7" width of the page for two-column-wide tables).

Tables should be located in the paper as close as possible to where they are first referenced (i.e., not clustered at the end of the paper). If a table requires the full width of the page, place it at the top or bottom of a page.

9. Figures

Figures consist of a drawing, graph, or other artwork.

Figures are numbered consecutively in the paper (using a sequence distinct from the numbering of tables). A legend appears underneath each figure in bold 10-point left-and-right-justified Times font with 4 points of leading afterwards (to separate the figure's legend from the text that follows).

Figures must either fit in-line into one column (3.375") or occupy the full 7" available width of the page. Do not use any odd-sized figures. Do not flow text around figures.

Do not let the figure or its legend run outside the 3.375" width of the column for in-line figures (or outside the 7" available width of the page for two-column-wide figures).

Figures should be located in the paper as close as possible to the place where they are first referenced (i.e., not clustered at the end of the paper). If a figure requires the full width of the page, place the figure at the top or bottom of the page.

The proceedings will be printed in black and white only. There will be no color printing of papers. Preferably, use just 100% blank and white areas in your figures. Use gray sparingly. Do not make artwork that involves multiple shades of gray. There is no way to easily tell in advance how complex shading will appear after they are photographed and printed by the printer.

The camera-ready page is to consist of a self-contained and complete printed page. Nothing is to be taped, glued, or attached in any way. If you have some artwork for a figure that is not being printed electronically along with your text, make a high-quality copy of that page yourself.

Figure 1 shows the *Anolis* lizard perched on a tree trunk.

Figure 1 *Anolis* lizard.

10. Program Code and Names

Names used in computer code (such as the subroutine, `ADF0`, the `PROGN` function, or `GET-FOOD` function) should be in a distinctive fixed-spacing "typewriter style" font, such as 10-point Courier.

Examples of computer code or LISP S-expressions should also be in a distinctive fixed-spacing "typewriter style" font, such as 10-point Courier, as shown below:

```
(+ X (* TIME 7.345))
```

11. Citations in the Text

Use the author's name and year so that the reader gets some information without having to look at the "Bibliography" at the end of the paper. For example, "Smith (1992)" "Smith and Doe (1996)," "Smith, Jones, and Doe (1996)," or, if there are more than three authors, "Smith et al. (1996)"

12. Mathematical Symbols

Mathematical symbols, such as M, should be in italics.

13. Italics and Bold-Faced Type

Use italics sparingly. Avoid bold-faced type or underlining in your paper. They usually **look** *really* <u>unprofessional</u>!!!

14. Odd Capitalization and Oddities

Only proper nouns should be capitalized. For example, there is no need to capitalize "Genetic Programming" in the middle of a sentence. Abbreviations and acronyms known only to specialists should be avoided. If in doubt, spell out the phrase and then put its acronym in parenthesis when it appears for the first time. Use quotation marks sparingly.

15. Footnotes

Footnotes should be avoided. They frequently break up the flow of the paper and, in any event, their purpose can always be accomplished by a parenthetical expression in the text. Also, they invite commission of the *fatal error* of extending outside the allowable live printing area.

16. Length of your Paper

You have already been notified of the length of your paper.

This allocation is for *everything*. You may take less than your allocated length, but not more. The retail price of proceedings book (and the price of the proceedings book to the conference organization) is already established based on these allocations and cannot be changed. Your paper will be rejected if you exceed your allocated length.

The 9 page "long" papers are essentially the same length as the papers submitted for peer review (i.e., 9 pages in 10-point font with the margins specified herein is equivalent to 10 pages in 12-point font with the slightly larger margins requested in the submitted papers).

The 6-page "short" papers are the "short" papers.

The 1-page "poster" pages provide a vehicle for informing people in the community of your ongoing work.

17. Hints for Shortening Papers

You can significantly shorten most papers (saving perhaps a full column on a 9-page paper) by previewing your paper in your word processor and eliminating widow lines. It is almost always possible to reword a paragraph so as to cause the deletion of the line of text that contains just one or two words.

It is customary to separate sentences with two spaces; however, you can save a few lines by using only one space.

You can save additional space by shortening section headings (or eliminating excessive use of section headings).

Do not, however, reduce the basic 10-point font size for the text or the Bibliography or shrink the section headings.

18. Common Errors to Avoid

• Be sure to print your TWO copies with VERY-HIGH-QUALITY. Since your paper will be produced by a photographic process from your camera-ready copy, be sure the printing is clear and sharp. Be sure your laser printer has adequate toner for printing when you print this. Use only single-sided printing.
• Be sure your paper is not longer than the number of pages allocated to your paper.
• Don't forget to delete the "Category" (e.g. "GP") that appeared on your submitted paper for purpose of directing your submitted paper to appropriate reviewers.
• Do not put any page numbers (or any running head of any kind) on the front side of your camera-ready paper. The papers will be numbered consecutively by the publisher from the beginning of the proceedings book.
• Be sure to sign and send in the copyright transfer ("Permission to Publish") form.
• Be sure to run your spell-checker one last time to catch errors introduced in your last round of changes.

19. Numbering Your Pages

Do not number the pages of your paper at the top or bottom of the front of your paper. Do not include any kind of running head at the top or bottom of your paper. Both the page numbers and the running heads will be added by the publisher prior to printing.

Write a number on the back of each page of your paper. Use a pencil and write at the very top of the back so there is no chance of damaging the live area of the front of your paper. Include your name, your paper number, the page number, and the total size of your paper on each page. Write "Smith G001 – `INDEX` of 9" on pages `INDEX` = 1, ... , 9. This is helpful to the publisher in case your pages get out of order at some point.

20. Shipping Your Paper

Send your **TWO** camera-ready VERY-HIGH-QUALITY copies of your paper and signed copyright transfer ("Permission to Publish") form to

GP-96 Conference
c/o American Association for Artificial Intelligence
445 Burgess Drive
Menlo Park, CA 94025 USA
PHONE: 415-328-3123

Don't wait to the last minute! Overseas shipments especially often experience unexpected complications (e.g., courier delays, weather, the international date line, etc.).

If you have questions, send us e-mail to `koza@cs.stanford.edu`.

21. Conclusions

The "Conclusion" section is a simple statement of the paper's actual results. It is not to be confused with a speculative "Future Work" section.

Acknowledgments

The "Acknowledgments" section is an unnumbered section that appears after the conclusion, but before the Bibliography. It is headed by the word "Acknowledgments" in the same 12-point bold Times font as a first-level section heading. The "Acknowledgments" section thanks people who may have helped with the paper in some supportive way (e.g., proofreading, providing ideas, making figures, computer programming, etc.) or funding organizations involved in the paper. This document is based on the formats used by the SAB conference (Stewart Wilson) and ALIFE conferences published by the MIT Press and of Peter Angeline's format instructions for the EP-96 conference.

Bibliography

The "Bibliography" section is an unnumbered section that appears at the end of the paper. It is headed by the word "Bibliography" in the same 12-point bold Times font as a first-level section heading. Bibliographic citations are to be in 10-point Times font and left-and-right-justified. The first line of each citation is not indented, but later lines are indented by 0.15 inch. Be sure to include pages numbers, volume numbers, dates, first names (or initials) in your citations. Carefully check your citations for accuracy. Do not use abbreviations for conference names or journal names (since some readers from outside your immediate specialized area may not be familiar with your abbreviations).

Koza, John R. 1992. *Genetic Programming: On the Programming of Computers by Means of Natural Selection*. Cambridge, MA: The MIT Press.

Example of a citation of a book

Koza, John R. 1994a. Spontaneous emergence of self-replicating and evolutionarily self-improving computer programs. In Langton, Christopher G. (editor). *Artificial Life III, SFI Studies in the Sciences of Complexity*. Volume XVII. Redwood City, CA: Addison-Wesley. Pages 225–262.

Example of a paper in a conference proceedings or in an edited collection of papers

Koza, John R. 1994c. Genetic programming as a means for programming computers by natural selection. *Statistics and Computing*. Volume 4. Pages 87–112.

Example of a journal article

Koza, John R. 1994d. *Architecture-Altering Operations for Evolving the Architecture of a Multi-Part Program in Genetic Programming*. Stanford University Computer Science Department technical report STAN-CS-TR-94-1528. October 21, 1994.

Example of a technical report