

# Sample Paper for CIG'12: The 2012 IEEE Conference on Computational Intelligence and Games

Pippilotta Långstrump, *Senior Member, IEEE*, Hermione Granger, *Member, IEEE*, and Filemón Pi

**Abstract**—The abstract goes here. Please try to make it less than 150 words. We suggest that you read this document carefully before you begin preparing your manuscript. As the IEEE does not want conference papers to contain keywords, ensure you do not include them in your paper. Also, at this time, the IEEE only has some general guidelines about the format for conference papers. It is up to each individual conference to decide which format to use. In order to have a uniform look for all papers published in the conference proceedings, we require that every author follow the format of this sample paper.

This template is for LaTeX users and is based on the CEC'07 template written by K.C. Tan. Many thanks go to him for his hard work. Authors should use this sample paper as a guide in the production of their paper. Word users should download and use the template files posted on the conference website.

## I. INTRODUCTION

If you have an introduction for your paper, put it here.

This sample file is intended to serve as a “starter file.” You need to replace the text in this file with the text that makes up your paper.

### A. Subsection Heading Here

If applicable, subsection text goes here. Note that you need to use `\subsection`. You may or may not have any subsections. That is okay.

1) *Subsubsection Heading*: Insert any subsubsection text here. Same thing as before — you may or may not have any subsubsections.

2) *About This Template*: This template is for LaTeX users and is based on the CEC'07 template written by K.C. Tan. Many thanks go to him for his hard work. Authors should use this sample paper as a guide in the production of their paper. Word users should download and use the template files posted on the conference website.

### B. Page Layout

- The IEEE now only accepts 100% Xplore compliant papers prepared in PDF format. Please make sure that you follow these guidelines in preparing your PDF files. Violations of any of these specifications may result in the rejection of your paper.
- Paper size: US letter format (8.5 × 11 in or 216 × 278 mm).
- Paper length: maximum 8 pages, including figures, tables, and references. In exceptional circumstances, up

to two additional pages will be permitted for a charge of USD\$100 per additional page.

- Paper format: double column, single spaced, 10pt font.
- Text width: 7.0 in (178 mm).
- Text height: 9.375 in (240 mm). All text and figures must be contained in the 178 × 240 mm image area.
- The left/right/bottom margin must be 0.75 in (19 mm).
- The top margin must be 0.75 in (19 mm), except for the title page, where it must be 1 in (25 mm).
- Text should appear in two columns, each 3.4 in (86.5 mm) wide, with 0.2 in (5 mm) space between columns.
- Do **NOT** number the pages in the manuscript.
- Unix LaTeX users should use the following commands to “compile” their paper:
  - latex mypaper
  - dvips -Ppdf -G0 -tletter mypaper.dvi
  - ps2pdf -dEmbedAllFonts=true mypaper.ps mypaper.pdf

The page size and margin settings in IEEEtran.cls are set for IEEE Transactions papers. Some adjustments have been made to produce this sample paper.

Also, please note, *IEEE PDF eXpress* will be made available to assist in creating IEEE Xplore compliant PDF files for camera-ready submission.

## II. RESULTS

The main results and findings go here.

Do not number an equation if it will not be directly cited in the paper. In order to avoid numbered equations, use `\begin{equation*}`–`\end{equation*}`, `\[ -\]`, or `$$-$$`. For example:

$$a = b + c,$$

$$\dot{x} = f(x, u) + g(x, u),$$

or

$$\ddot{s} = G(s, t)$$

where  $f$ ,  $g$ , and  $G$  are functions.

Note that Equation (1) below is numbered! It is produced using `\begin{equation}`–`\end{equation}`:

$$F_i(P_i) = a_i + b_i P_i + c_i P_i^2 \quad (1)$$

where  $a_i$ ,  $b_i$ , and  $c_i$  are coefficients of unit  $i$ , and  $P_i$  represents some value for unit  $i$ .

Aligning equations can be done with either the `align` or `eqnarray` commands. Recently, `\begin{align}`–`\end{align}` has gained popularity over `\begin{eqnarray}`–`\end{eqnarray}`.

Equation (2) is produced using `\begin{align}–\end{align}`:

$$\begin{aligned}\dot{x}_l &= \sum_{i=1}^m \frac{c_{P_{x_i}} e^{k_{x_i} \bar{x}_i} + c_{N_{x_i}} e^{-k_{x_i} \bar{x}_i}}{e^{k_{x_i} \bar{x}_i} + e^{-k_{x_i} \bar{x}_i}} \\ &\quad + \frac{1}{2} \sum_j^q (c_{P_{u_j}} + c_{N_{u_j}}) \\ y &= A_0 + A_1 \tanh(K_x \bar{x}) + B \tanh(K_u \bar{u}) \\ &= F(x),\end{aligned}\tag{2}$$

where  $F(x)$  is a function.

Equation (3) represents the same equation produced using `\begin{eqnarray}–\end{eqnarray}`:

$$\begin{aligned}\dot{x}_l &= \sum_{i=1}^m \frac{c_{P_{x_i}} e^{k_{x_i} \bar{x}_i} + c_{N_{x_i}} e^{-k_{x_i} \bar{x}_i}}{e^{k_{x_i} \bar{x}_i} + e^{-k_{x_i} \bar{x}_i}} \\ &\quad + \frac{1}{2} \sum_j^q (c_{P_{u_j}} + c_{N_{u_j}}) \\ y &= A_0 + A_1 \tanh(K_x \bar{x}) + B \tanh(K_u \bar{u}) \\ &= F(x),\end{aligned}\tag{3}$$

where  $F(x)$  is a function. You get the idea!

#### A. Example of a Figure

Below is an example of a floating figure using the `graphicx` package. Note that `\label` must occur AFTER (or within) `\caption`. For figures, `\caption` should occur after the `\includegraphics`. To reference a figure, use the word Figure followed by the figure number. Here is an example: Figure 1.



Fig. 1. The first author and a member of her team

#### B. Figures and Tables

Please follow the style in this sample paper when generating your figures and tables.

#### C. What Sections to Include

Usually, your paper should contain an Introduction, Background, Methodology, Results, and Conclusions section. You may also add Acknowledgments if you like. After that, you should list your references in a References section.

TABLE I  
PAGE LIMIT

Page limit:	8
Excess page charge:	USD\$100/page

#### D. Page Limit and Overlength Page Charges

A paper submitted to this conference should be prepared in a single-spaced, two-column format. Its length must be kept to 8 pages or less. In exceptional circumstances, up to two additional pages will be permitted for a charge of USD\$100 per additional page. Table I shows the page limit and page charge schedule.

Another example of a table is shown in Table II.

TABLE II  
A SECOND TABLE

Method	Mean time	Best time	Mean cost	Maximum cost	Minimum cost
A	928.36	926.20	124793.5	126902.9	123488.3
B	646.16	644.28	124119.4	127245.9	122679.7
C	1056.8	1054.2	123489.7	124356.5	122647.6
D	632.67	630.36	123382.0	125740.6	122624.4

Citations are included like so [1]. Multiple citations appear like this [2], [3].

### III. CONCLUSIONS

The conclusion goes here.

This template is for LaTeX users. This CIG'12 LaTeX template is based on the CIG'08 template written by Luigi Barone and the CEC'07 template written by K.C. Tan. Many thanks go to them for their hard work. Authors should use this sample paper as a guide in the production of their paper. Word users should download and use the template files posted on the conference website.

#### APPENDIX

Put your appendix here if you have any.

#### ACKNOWLEDGMENTS

The authors would like to thank Mr. XYZ for his/her help. This work was supported in part by the National Science Foundation under grant no. XXXXX, etc.

#### REFERENCES

- [1] A. Great, *This is the book title*. This is the name of the publisher, 2006.
- [2] F. Author, S. Author, and T. NonRelatedAuthor, "This is the paper title," in *This is the proceedings title*, 2008, pp. 1–8.
- [3] B. Myself, "This is the title of the journal article," *This is the name of the journal*, pp. 1–30, 2007.