

# Sample Paper for UKCI'11: The 2011 UK Workshop on Computational Intelligence

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## 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.

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### 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 6 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.

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- 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`

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## 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}`:

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

where  $F(x)$  is a function.

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

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

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.

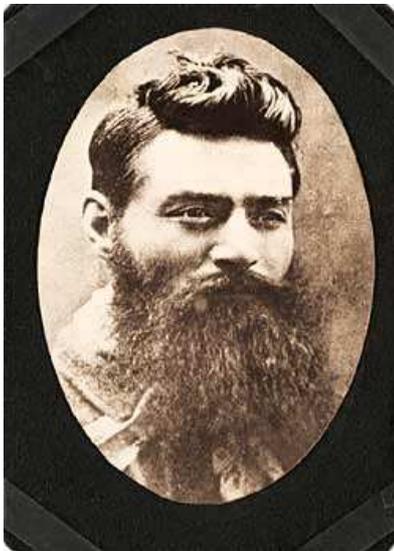


Fig. 1. A famous Australian bush-ranger: Ned Kelly

#### B. Figures and Tables

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

TABLE I  
PAGE LIMIT

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

#### 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.

#### 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 6 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.

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#### 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.