**Software paper for submission to MEDSCI 736 University of Auckland**

To complete this template, please replace the blue text with your own. The paper has three main sections: (1) Overview; (2) Availability; (3) Reuse potential.

Please submit the completed paper to: f.kubke@auckland.ac.nz

**(1) Overview**

Title

The title of the software paper should focus on the software, e.g. “Text mining software from the X project”. The title should be factual, relating to the functionality of the software and the area it relates to rather than making claims about the software, e.g. “Easy-to-use”.

Paper Authors

1. *Birrell, N. W.*

2. Last name, first name; *etc.*

Paper Author Roles and Affiliations

1. First author role and affiliation

2. Second author role and affiliation *etc.*

Abstract

A short (ca. 100 word) summary of the software being described: what problem the software addresses, how it was implemented and architected, where it is stored, and its reuse potential.

Keywords

keyword 1; keyword 2; *etc.*

Keywords should make it easy to identify who and what the software will be useful for.

Introduction

The software is attended to

An overview of the software, how it was produced, and the research for which it has been used, including references to relevant research articles. A short comparison with software which implements similar functionality should be included in this section. Please refer to <http://openresearchsoftware.metajnl.com/articles/> for exemplars.

**Implementation and architecture**

How the software was implemented, with details of the architecture where relevant. Use of relevant diagrams is appropriate. Please also describe any variants and associated implementation differences.

**Quality control**

Detail the level of testing that has been carried out on the code (e.g. unit, functional, load etc.), and in which environments. If not already included in the software documentation, provide details of how a user could quickly understand if the software is working (e.g. providing examples of running the software with sample input and output data).

**(2) Availability**

***Operating system***

All operating systems that run Python <confirm at end based on libraries used>

***Programming language***

Python v. 3.0

***Additional system requirements***

E.g. memory, disk space, processor, input devices, output devices.

***Dependencies***

E.g. libraries, frameworks, incl. minimum version compatibility.

***List of contributors***

Please list anyone who helped to create the software (who may also not be an author of this paper), including their roles and affiliations.

***Software location:***

***Archive*** (e.g. institutional repository, general repository) (required – please see instructions on journal website for depositing archive copy of software in a suitable repository)

***Name:*** The name of the archive

***Persistent identifier:*** e.g. DOI, handle, PURL, etc.

***Licence:*** Open license under which the software is licensed

***Publisher:*** Name of the person who deposited the software

***Version published:***The version number of the software archived

***Date published:*** dd/mm/yy

**Code repository** (e.g. SourceForge, GitHub etc.) (required)

***Name:*** The name of the code repository

***Identifier:*** The identifier (or URI) used by the repository

***Licence:*** Open license under which the software is licensed

***Date published:*** dd/mm/yy

**Emulation environment** (if appropriate)

***Name:*** The name of the emulation environment

***Identifier:*** The identifier (or URI) used by the emulator

***Licence:*** Open license under which the software is licensed here

***Date published:*** dd/mm/yy

***Language***

English

Language of repository, software and supporting files (including links to documentation)

**(3) Reuse potential**

Please describe in as much detail as possible the ways in which the software could be reused by other researchers both within and outside of your field. This should include the use cases for the software, and also details of how the software might be modified or extended (including how contributors should contact you) if appropriate. Also you must include details of what support mechanisms are in place for this software (even if there is no support).

**Acknowledgements**

Please add any relevant acknowledgements to anyone else who supported the project in which the software was created, but did not work directly on the software itself.

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**Competing interests**

The authors declare that they have no competing interests

**References**

Please enter references in the Harvard style and include a DOI where available, citing them in the text with a number in square brackets, e.g.

[1] Piwowar, H A 2011 Who Shares? Who Doesn't? Factors Associated with Openly Archiving Raw Research Data. *PLoS ONE* 6(7): e18657. DOI: http://dx.doi.org/10.1371/journal.pone.0018657.

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