

K3D-jupyter: simple and efficient 3d visualization in Jupyter notebook

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Your institute, some address

Abstract

Ca. 100 words

Keywords: keyword 1, keyword 2, keyword 3

1 Description of your software in maximum 6 pages.

2 1. Motivation and significance

3 Introduce the scientific background and the motivation for developing the
4 software.

5 Explain why the software is important, and describe the exact (scientific)
6 problem(s) it solves.

7 Indicate in what way the software has contributed (or how it will con-
8 tribute in the future) to the process of scientific discovery; if available, this
9 is to be supported by citing a research paper using the software.

10 Provide a description of the experimental setting (how does the user use
11 the software?).

12 Introduce related work in literature (cite or list algorithms used, other
13 software etc.).

14 2. Software description

15 Describe the software in as much as is necessary to establish a vocabulary
16 needed to explain its impact.

17 2.1. Software Architecture

18 Give a short overview of the overall software architecture; provide a pic-
19 torial component overview or similar (if possible). If necessary provide im-
20 plementation details.

21 *2.2. Software Functionalities*

22 Present the major functionalities of the software.

23 *2.3. Sample code snippets analysis (optional)*

24 **3. Illustrative Examples**

25 Provide at least one illustrative example to demonstrate the major func-
26 tions.

27 Optional: you may include one explanatory video that will appear next
28 to your article, in the right hand side panel. (Please upload any video as a
29 single supplementary file with your article. Only one MP4 formatted, with
30 50MB maximum size, video is possible per article. Recommended video
31 dimensions are 640 x 480 at a maximum of 30 frames/second. Prior to
32 submission please test and validate your .mp4 file at *http://elsevier –*
33 *apps.sciverse.com/GadgetVideoPodcastPlayerWeb/verification*. This tool
34 will display your video exactly in the same way as it will appear on ScienceDi-
35 rect.).

36 **4. Impact**

37 **This is the main section of the article and the reviewers weight**
38 **the description here appropriately**

39 Indicate in what way new research questions can be pursued as a result
40 of the software (if any).

41 Indicate in what way, and to what extent, the pursuit of existing research
42 questions is improved (if so).

43 Indicate in what way the software has changed the daily practice of its
44 users (if so).

45 Indicate how widespread the use of the software is within and outside the
46 intended user group.

47 Indicate in what way the software is used in commercial settings and/or
48 how it led to the creation of spin-off companies (if so).

49 **5. Conclusions**

50 Set out the conclusion of this original software publication.

51 **Acknowledgements**

52 Optionally thank people and institutes you need to acknowledge.

53 **References**

54 [1]

55 **Required Metadata**

56 **Current code version**

57 Ancillary data table required for subversion of the codebase. Kindly re-
 58 place examples in right column with the correct information about your cur-
 59 rent code, and leave the left column as it is.

Nr.	Code metadata description	Please fill in this column
C1	Current code version	For example v42
C2	Permanent link to code/repository used for this code version	For example: <i>https</i> : <i>//github.com/mozart/mozart2</i>
C3	Legal Code License	List one of the approved licenses
C4	Code versioning system used	For example svn, git, mercurial, etc. put none if none
C5	Software code languages, tools, and services used	For example C++, python, r, MPI, OpenCL, etc.
C6	Compilation requirements, operating environments & dependencies	
C7	If available Link to developer documentation/manual	For example: <i>http</i> : <i>//mozart.github.io/documentation/</i>
C8	Support email for questions	

Table 1: Code metadata (mandatory)

60 **Current executable software version**

61 Ancillary data table required for sub version of the executable software:
 62 (x.1, x.2 etc.) kindly replace examples in right column with the correct
 63 information about your executables, and leave the left column as it is.

Nr.	(Executable) software meta-data description	Please fill in this column
S1	Current software version	For example 1.1, 2.4 etc.
S2	Permanent link to executables of this version	For example: <i>https</i> : <i>//github.com/combogenomics/DuctApe/releases/tag/DuctApe - 0.16.4</i>
S3	Legal Software License	List one of the approved licenses
S4	Computing platforms/Operating Systems	For example Android, BSD, iOS, Linux, OS X, Microsoft Windows, Unix-like , IBM z/OS, distributed/web based etc.
S5	Installation requirements & dependencies	
S6	If available, link to user manual - if formally published include a reference to the publication in the reference list	For example: <i>http</i> : <i>//mozart.github.io/documentation/</i>
S7	Support email for questions	

Table 2: Software metadata (optional)