

Pure Data

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ABSTRACT

Pd (aka Pure Data) is a real-time graphical programming environment that is part of the Max family of graphical patcher programming languages for audio, music and multimedia.

Keywords

Audio, video, DSP, realtime, graphics, patcher programming.

1. PURE DATA

Pd[1] is a real-time graphical programming environment for audio, video, and graphical processing. It is the third major branch of the family of patcher programming languages known as Max (Max/FTS, ISPW Max, Max/MSP, jMax, etc.) originally developed by Miller Puckette at IRCAM. The core of Pd is written and maintained by Miller Puckette[2] and includes the work of many developers, making the whole package very much a community effort.

Pd was created to explore ideas of how to further refine the Max paradigm with the core ideas of allowing data to be treated in a more open-ended way and opening it up to applications outside of audio and MIDI, such as graphics and video.

It is easy to extend Pd by writing object classes ("externals") or patches ("abstractions"). The work of many developers is already available as part of the standard Pd packages and the Pd developer community is growing rapidly. Recent developments include a system of abstractions for building performance environments[3]; a library of objects for physical modeling[4]; and libraries of objects for generating and processing video in realtime[5][6][7][8].

Pd is free software and can be downloaded either as an OS-specific package, source package, or directly from CVS[9]. Pd was written to be multi-platform and therefore is quite portable; versions exist for Win32, IRIX, GNU/Linux, BSD, and MacOS X running on anything from a PocketPC[13] to an old Mac to a brand new PC. It is possible to write externals and patches that work with Max/MSP[10] and Pd using flex[11] and cyclone[12].

2. MAJOR CONTRIBUTORS

There are many people who have contributed to Pd who are not on this list, otherwise it would be exceedingly long. This is a list of the major contributors:

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3. ACKNOWLEDGMENTS

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4. REFERENCES

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- [2] <http://crca.ucsd.edu/~msp/>
- [3] <http://pure-data.info/community/projects/rradical/>

- [4] <http://drpichon.free.fr/pmpd/>
- [5] <http://gem.iem.at>
- [6] <http://zwizwa.fartit.com/pd/pdp/overview.html>
- [7] <http://artengine.ca/jmax/gridflow/>
- [8] <http://framestein.org/>
- [9] <http://sourceforge.net/projects/pure-data>
- [10] <http://www.cycling74.com>
- [11] <http://www.parasitaere-kapazitaeten.net/ext/flect/>
- [12] <http://suita.chopin.edu.pl/~czaja/miXed/externs/cyclone.html>
- [13] <http://gige.xdv.org/pd/PDa>