

Octave: An Open Source Alternative to MATLAB

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Open source software is becoming increasingly widespread and important in all areas of computer usage, including technical computing. MATLAB, while being a de facto standard software in technical computing, is a proprietary, closed source software and therefore its users cannot enjoy some of the benefits that open source software brings.

This paper presents Octave, an open source ‘clone’ of MATLAB. The primary goals of the Octave project are presented, along with its current state and history. Compatibility between MATLAB and Octave is discussed and notable differences are pointed out. The benefits of using open source software for technical and scientific computing are considered, as well the current status of this area.

The allied Octave-Forge project, providing functionality analogical to MATLAB toolboxes, is also discussed, and a summary of the available packages’ functionality is provided.

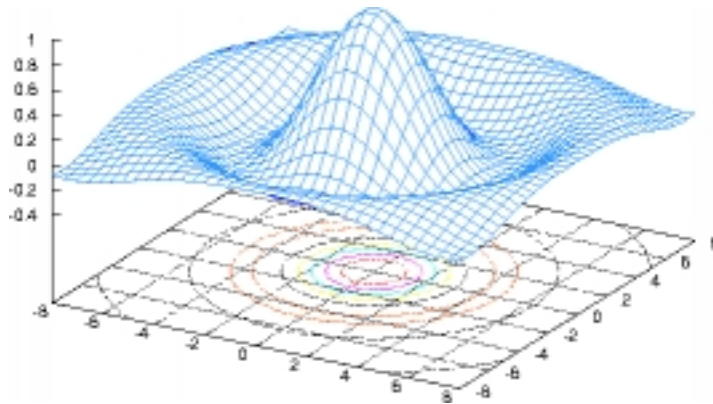


Figure 1: ‘Sombrero’, the Octave logo