

## GPU-accelerated MATLAB with New Jacket v1.1.1 Release – It's grand()!

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FOR IMMEDIATE RELEASE:

ATLANTA, GA—AUGUST 14, 2009— AccelerEyes is pleased to announce the release of Jacket v1.1.1 – the GPU engine for MATLAB®. This release includes random-number generation with grand() and double-precision support for FFT functions. All Jacket trials have been reset, so if you've trialed Jacket in the past, you now have another chance to trial again. In this newer version of Jacket are the following enhancements:

- fft is now supported for gdouble inputs.
- grandn - GPU version of randn.
- grand - GPU version of rand.
- sort(X) is now supported.
- cumsum(X) is now supported for vectors.
- cumprod(X) is now supported for vectors.
- permute, ipermute is now supported.
- repmat is now supported for complex inputs.
- The gcache command now allows users to manipulate the cache by flushing, saving or loading it.
- The command 'ghelp' displays information about functions supported by Jacket on the MATLAB console:
  - Features different from MATLAB's implementation of the function
  - Supported syntax for the function
  - Where relevant, whether a function can be used within a gfor loop.
- mod and rem now have complex support.
- xor support for float data types.

Jacket 1.1.1 requires CUDA 2.3. The CUDA drivers and toolkit may be downloaded here: [http://www.nvidia.com/object/cuda\\_get.html](http://www.nvidia.com/object/cuda_get.html)

We expect to release Jacket 1.2 very soon with support for running Jacket across multiple GPUs. This will work in conjunction with MATLAB's Parallel Computing Toolbox (PCT). For every GPU in the system (including both workstations and clusters), a PCT Worker will be assigned which will have the ability to offload computations from the CPU to the GPU. This will enable maximal performance under any given hardware

configuration. In anticipation of this release, we recommend that you trial PCT and learn about how it will improve your multicore workstation or clustered computing performance. You can learn more here: <http://www.mathworks.com/products/parallel-computing/>

Trials (15 day) are available to allow you to explore Jacket prior to purchase. Trials can be activated by visiting: [http://www.accelereyes.com/manage\\_licenses.php](http://www.accelereyes.com/manage_licenses.php)

We look forward to receiving feedback on the Jacket forums and look forward to continually upgrading Jacket to further deliver on our vision of simple software for powerful visual computing.

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## About AccelerEyes

Founded in 2007, and located in Atlanta, Georgia, AccelerEyes is leading the software-side of the movement towards visual computing. AccelerEyes' products bring a level of supercomputing power to standard personal computers.

In order for high performance computing (HPC) companies to adopt GPU technologies, a robust and healthy software tool chain must be created to connect programmers to GPU hardware. While hardware manufacturers are building lower-level software tools, such as CUDA, which support their devices, AccelerEyes delivers high-level interfaces which remove the lower-level complexity.

AccelerEyes' first product, Jacket, is used by customers across all major HPC industries, such as the automotive, financial, medical, and seismic industries. Further, Jacket's Graphics Toolbox enables true Visual Computing, seamlessly merging the compute power of CUDA with OpenGL visualizations. AccelerEyes plans to adapt and expand Jacket for other hardware and software platforms.

AccelerEyes is a division of DivEyes, an Atlanta incubator for Digital Imaging and Vision Solutions.

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