

# GAI - Multi Agent Collision Avoidance Toolkit

## Release Notes

### Version 0.1.0 (06/17/2008):

- Reference C++ CPU path, not highly optimized.
- Initial package.

### Version 0.4.0 (02/10/2009):

- Spatial hash experimentation.
- Evacuation simulations for 5K/10K/20K agents are more for performance measurements.
- Dependencies:
  - o Visual Studio SP1 2008 C runtime libraries (use Visual C++ Redistributable Package).
  - o CUDA 2.1 toolkit and a matching display driver.
  - o DirectX Redistributable, End-User Runtime (November 2008).

### Version 0.6.0 (05/07/2009):

- Support for dynamic obstacles.
- Initial pass at nested data parallel in iterating candidate velocities.
- Dependencies:
  - o Visual Studio SP1 2008 C runtime libraries (use Visual C++ Redistributable Package).
  - o CUDA 2.2 toolkit and a matching display driver.
  - o DirectX Redistributable, End-User Runtime (March 2009).

### Version 0.7.0 (07/27/2009)

- Efficient software instancing for rendering.
- Return 'Unsupported Yet' error when attempting to run on OpenCL or DirectCompute platforms.
- Multi GPU unsupported, silently pick up the first compute device in the list.
- Dependencies:
  - o Visual Studio SP1 2008 C runtime libraries (use Visual C++ Redistributable Package).
  - o CUDA 2.3 toolkit and a matching display driver.
  - o DirectX Redistributable, End-User Runtime (March 2009).

### Version 0.7.5 (09/25/2009)

- Using textured obstacles.
- Dependencies:
  - o Visual Studio SP1 2008 C runtime libraries (use Visual C++ Redistributable Package).
  - o CUDA 2.3 toolkit and a matching display driver.
  - o DirectX Redistributable, End-User Runtime (August 2009).

### Version 0.8.0 (03/19/2010)

- Technology Preview version.
- One binary for both Fermi and Tesla (minimum compute capable 1.1).
- User setting of CPU cores maxed transparently by system availability.
- Dependencies:

- Visual Studio SP1 2008 C runtime libraries (use Visual C++ Redistributable Package).
- CUDA 3.0 toolkit and a matching display driver.
- DirectX Redistributable, End-User Runtime (February 2010).

### **Version 0.8.5 (06/08/2010)**

- Support for dynamic environment (e.g. add/rm agents and obstacles), valid in real time simulation mode.
- Support for dynamic goals, valid in real time simulation mode.
- Dependencies:
  - Visual Studio SP1 2008 C runtime libraries (use Visual C++ Redistributable Package).
  - CUDA 3.1 toolkit and a matching display driver.
  - DirectX Redistributable, End-User Runtime (June 2010).