

# Clustering the NVIDIA CUDA Engine

by

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## **Abstract**

Apparently, the NVIDIA CUDA engine is a very befitting software structure for realized dramatic speedup of the maxT multiple hypothesis testing procedure [Welbourn, Jr. (2010)]. This article outlines a GPU clustering methodology for attaining additional computational speed from the NVIDIA CUDA engine, and proposes two different desktop supercomputer outfits to warehouse the clustered GPUs. In theory, the slower of the two supercomputers could attain computational results more than 500 times quicker than a single executed thread of PLINK [Purcell et al. (2007)], while the faster supercomputer more the 1,400 times quicker. As a result, immediate and accurate results from the maxT multiple hypothesis testing procedure become a realization, as opposed to waiting years for computational results to unfold. This approach is both practical and exceptionally cost efficient, when compared to traditional computer clustering.