

## GPU Technology Conference 2010 Sessions on Embedded & Automotive (subject to change)

*IMPORTANT: Visit [www.nvidia.com/qtc](http://www.nvidia.com/qtc) for the most up-to-date schedule and to enroll into sessions to ensure your spot in the most popular courses.*

---

### **2213 - BCSLIB-GPU: Significant Performance Gains for CAE**

Hear product architects and developers describe the algorithmic depths and high level breath of the use of GPUs that have been employed to create BCSLIB-GPU, the GPU enablement of the industry standard sparse matrix software suite, BCSLIB-EXT. We provide a range of comparison data with Tesla and Fermi compared with multi-core CPU only systems and for a wide range of realistic demanding real world test problems.

Speaker: Danl Pierce, Access Analytics Int'l, LLC

Topics: Tools & Libraries, Algorithms & Numerical Techniques, High Performance Computing, Embedded & Automotive

Time: Thursday, September, 23rd, 15:00 - 15:20

### **2175 - Hello GPU: High-Quality, Real-Time Speech Recognition on Embedded GPUs**

In this presentation, we will talk about our experiences of implementing an end-to-end automatic speech recognition system that runs in faster than real-time on embedded GPUs, targeted towards small form-factor consumer devices. Focusing specifically on some of the challenges encountered during the design process, a major portion of our talk will focus on giving insights into modifications we made to well-established speech algorithms to fit well within the GPU programming model. We will show how these changes helped us in realizing a highly optimized system on platforms with limited memory bandwidth and compute resources.

Speaker: Kshitij Gupta, UC Davis

Topics: Embedded & Automotive, Audio Processing, Signal processing, Mobile & Tablet & Phone

Time: Thursday, September, 23rd, 14:00 - 14:50