Advanced Topics in Databases

Exercise 1

Summer Term 2014

1. What is a GPU? Discuss the differences to CPUs. Why would you (not) use a GPU for data processing?

2. Sketch and discuss the architectural properties of GPUs. What potential performance pitfalls for GPU algorithms can you derive?

3. Explain the programming model that is most commonly used to program GPUs. Which GPU programming frameworks are available?

4. Name and explain the general problems for data processing in GPU-accelerated DBMS!

5. Create a list of GPU-accelerated database management systems. What are their common properties?

6. Discuss different storage and processing models for DBMS. Which storage model and which processing model are (not) suited for GPU-accelerated DBMS?

Good Luck!