CS 848 – Modern Database Systems

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http://cs.uwaterloo.ca/~tozsu
Older but a bit more helpful
Two parts

- A brief overview of database technology
  - Warning: this is not a tutorial; just an overview of basic functionality
- … and technology changes that impact database systems
- New systems
  - NewSQL
  - NoSQL
  - Column stores
  - MapReduce-based systems
  - Stream processing systems
  - Graph processing (both querying and analysis) systems
Course Information

- Prerequisites: need to know database technology (internals) fairly well.
  - DO NOT take the course if you don't and you don't feel comfortable reading database research papers
- Will discuss 4 papers each week
- There is no textbook for the course; I will indicate some that have parts of what we will cover
- The web page for the course: https://cs.uwaterloo.ca/~tozsu/courses/cs848/W15/
Workload & Evaluation

- Research Project: 40%
  - Usually in groups of 2
  - Can be experimental or conceptual
  - Pick a problem (in consultation with me) and
    - Understand it fully and the literature about it
    - Show me how you would solve it and what is novel about your solution
  - Each group presents at the end of the course (public presentation)
- Class presentation(s): 20%
- 2 critical reviews of research papers: 20%
- Class participation: 20%
  - Participation in class discussions
  - Short reviews of papers presented each week (1/2 page)
  - Evaluation of other students’ presentations