Computing Science Course Outlines 2022 Summer

CMPT 459 - D100 Special Topics Database Systs

Instructor(s): Tianzheng Wang

SFU Burnaby

Calendar Objective/Description:
Special Topics Database Systs

Instructor's Objectives:
This is a seminar-style special topics course (cross-listed with CMPT 984) on the recent advances in the design and implementation of database systems. Specifically we focus on the impact of the changing hardware and programming languages on database management systems and related software primitives. Topics include database architecture and techniques in the context of manycore/multicore processors, persistent memory, flash memory, high-speed, low-latency networks (e.g., RDMA), programmable networks and hardware accelerators (e.g., FPGAs), as well as new programming language features (e.g., coroutines).

Please note this offering is different from previous CMPT 459 offerings on data mining.

Prerequisites:
see go.sfu.ca

Topics:
- Database systems
- Persistent memory
- Storage systems
- Transaction processing
- Data analytics systems

Grading:
To be discussed in the first week of class.

Academic Honesty Statement::
Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct Policies (http://www.sfu.ca/policies/gazette/student.html).