



AY2023/24 Trimester 3

Dr. ZHANG Wei

INF2003: Database Systems Overview

SingaporeTech.edu.sg



About me



- Email: wei.zhang@singaporetech.edu.sg
- SIT Homepage: <https://www.singaporetech.edu.sg/directory/faculty/wei-zhang>
- Google Homepage: <https://sites.google.com/view/sit-zhang-wei/>
- PhD in Computer Science from NTU.
- Research: applied AI + energy efficiency.
- Teaching database since 2019
 - Partly because I was involved in database tasks in A*STAR during 2017-19.
 - Content customized to different programmes, e.g., more in-depth for CSC and SE programmes.
 - Now harmonized as INF2003; difficulty level lower, e.g., than CS.
- Looking after our Computing Science programme.
 - ~ one quarter of whole ICT applicants and ~ half with 3.6+ GPA.
 - Interested in inter-programme collaboration, activities, etc., email me.
 - Interested in applied learning in my projects, welcome (but after this tri)

Overview



- Topics: SQL, NoSQL, blockchain, etc.
- Lectures
 - Weekly (Monday).
 - Faculty:
 - ZHANG Wei
 - Li Xiaorong
 - Location: ZOOM. (2nd half may use a different link)
- Labs/Tutorials
 - Weekly (Thursday).
 - Instructors:
 - Jonathan Lim Yu Kuang
 - Chan Nai Tiong
 - Yang Changjun
 - Location: NYP-SR5D/5G/6H (may change without notifying me)

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Tentative Course Schedule



Week	Lecture	Lab	Week	Lecture	Lab
1	Database introduction	Lab 1	8	Indexing	Lab 5
2	SQL basics	Lab 2	9	Transaction	Lab 6
3	SQL complex	Lab 3	10	NoSQL	Lab 7
4	ER diagram	Lab 4	11	Blockchain	Lab 8
5	Database refinement	Tut 1	12	Data warehouse	Tut 2
6	Quiz	Project	13	Quiz	Project

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Labs and Assessments



- **Lab:** 10% + 10% = **20%**.
 - Participation.
 - Submission.
- **Quiz:** 25% + 25% = **50%**.
 - Week 6. Content covered in Week 1 - 5.
 - Week 13. Content covered in Week 8 - 12
- **Group project:** 15% + 15% (demo, presentation, report, peer assessment).
 - A description document will be shared.

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