Course 1 Overview

- Welcome to Relational Database Design
- This course will prepare you with the tools needed to design a Relational Database System.
- You will learn fundamental concepts such as Entities, Relationships, Relations, Keys, Functional Dependencies, and Normalization.
- You will be able to represent your idea with an implementable Relational Database.

Who Am I

- My name is Di Wu.

  - You can call me Di (pronounced as Dee).

  - Have taught Programming Languages, Algorithms and Data Structures, Database Management Systems, Data Mining, and Machine learning.

  - I am very excited to work with you for this course.

University of Colorado **Boulder**

Learning Objectives

- Finishing this course, you will be able to:
  - Understand and explain Entities and Relationships
  - Draw ER(A)D(Entity Relationship (Attribute) Diagrams)
  - Understand and explain Relations
  - Convert ERAD to a Relational Model
  - Understand and explain Normalization Forms and Process
  - Normalize a Relational Model to Third Normal Form

Course Outline

- Module 1: Entity Relationship Models

- Module 2: Relational Models

- Module 3: Normalization

- Module 4: Case Study