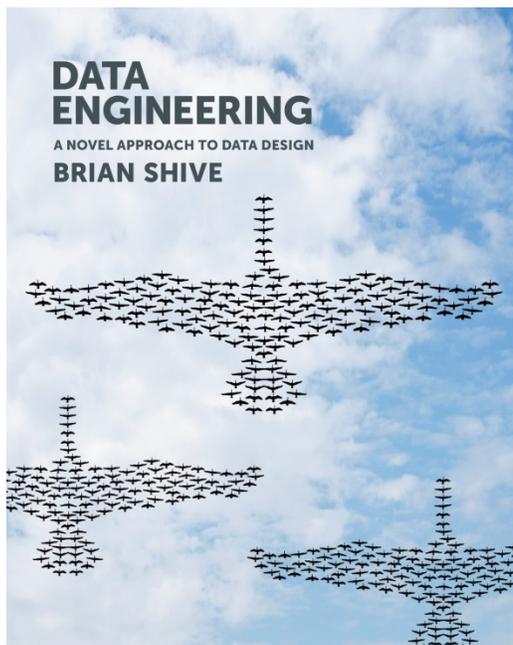# Data Engineering
## A Novel Approach to Data Design

If you found a rusty old lamp on the beach, and upon touching it a genie appeared and granted you three wishes, what would you wish for? If you were wishing for a successful application development effort, most likely you would wish for accurate and robust data models, comprehensive data flow diagrams, and an acute understanding of human behavior.

The wish for well-designed conceptual and logical data models means the requirements are well-understood and that the design has been built with flexibility and extensibility leading to high application agility and low maintenance costs. The wish for detailed data flow diagrams means a concrete understanding of the business' value chain exists and is documented. The wish to understand how we think means excellent team dynamics while analyzing, designing, and building the application.

Why search the beaches for genie lamps when instead you can read this book? Learn the skills required for modeling, value chain analysis, and team dynamics by following the journey the author and son go through in establishing a profitable summer lemonade business. This business grew from season to season proportionately with his adoption of important engineering principles. All of the concepts and principles are explained in a novel format, so you will learn the important messages while enjoying the story that unfolds within these pages.



The story is about an old man who has spent his life designing data models and databases and his newly adopted son. Father and son have a 54 year age difference that produces a large generation gap. The father attempts to narrow the generation gap by having his nine-year-old son earn his entertainment money. The son must run a summer business that turns a lemon grove into profits so he can buy new computers and games. As the son struggles for profits, it becomes increasingly clear that dad's career in information technology can provide critical leverage in achieving success in business. The failures and successes of the son's business over the summers are a microcosm of the ups and downs of many enterprises as they struggle to manage information technology.

Brian and his wife and two children live in the Seattle area. He teaches Aramaic in his Methodist church and can be seen on YouTube sounding at times like Jimi Hendrix. He is working on a book of poetry and loves teaching data modeling, database design and data integration. The human brain and the behavior it elicits have provided Brian with years of study in neurology, psychology, sociology and history.