Abstract
After many years of standardization on relational database, the last few years have seen the introduction of four new data management paradigms: Key-Value Database, Big Table Database, Document Database, and Graph Database (and, by one estimate, at least 250 new DBMS products on the market that implement them.) This talk will explain these four technologies in a largely conceptual, product-independent, data structures-oriented manner, with the goal of really understanding what they are all about.

About the Speaker
Mark L. Gillenson is Professor of Business Information and Technology (formerly MIS) in the Fogelman College of Business and Economics of the University of Memphis in Memphis, TN. He received his B.S. degree in Mathematics from Rensselaer Polytechnic Institute, Troy, N.Y. and his M.S. and Ph.D. degrees in Computer and Information Science from The Ohio State University, Columbus, OH. Dr. Gillenson worked for the IBM Corp. for 15 years in a variety of positions, including seven years as a faculty member of the prestigious IBM Systems Research Institute. Subsequently, he was a professor at the University of Miami, Miami FL. Dr. Gillenson’s current areas of interest are “big data”, autonomous vehicles, and systems testing. He is an associate editor of the Journal of Database Management. Dr. Gillenson’s research has appeared in MIS Quarterly, Communications of the ACM, Information & Management, Methods of Information in Medicine, and other leading journals. His latest book is Fundamentals of Database Management Systems, 2nd edition, John Wiley & Sons, 2012. Dr. Gillenson has been a continuous member of the ACM since November, 1969. As a graduate student, Dr. Gillenson invented the world’s first computerized facial compositor and co-developed an early computer graphics system that, among other things, was used to produce some of the special effects in the first Star Wars movie.