**Dennis E. Shasha**

**Dennis E. Shasha** is a major contributor to the theory and practice of large data systems, tamper-resistant file systems, computational biology, real-time systems, and fast analysis of time series. In the field of transaction processing, he built a model for concurrent algorithms for search structures, which showed how to go beyond the standard conflict-preserving model to achieve more concurrency. This model can express algorithms on any data structure that could be represented as a graph, and thus it could be applied to search structures ranging from simple hash structures to exotic multi-dimensional data structures and is particularly useful in multi-core computing. Particularly outstanding is his research in the field of pattern matching. Almost half of his top twenty papers are in this area and resulted in nearly 3,000 citations. He has also worked in biological applications, an area in which he, in collaboration with Gloria Coruzzi, has developed bioinformatics algorithms to discover important genes and, by using the inference of causality, important connections among genes. He is the creator of a character named Dr. Ecco, a mathematical detective and problem solver. He has been the puzzle columnist for various magazines including Scientific American and now CACM.

A professor of computer science at the Courant Institute since 1995, he has also served as a Distinguished Science Advisor at the New York Hall of Science since 2003, is an ACM Fellow, an INRIA international chair. He teaches courses in advanced database systems and heuristic problem solving as well as a first year seminar.

Professor Shasha earned his BSc in electrical engineering from Yale University, his MSc from Syracuse University (overlapping with his work at IBM's Data Sciences Division), and his PhD in applied mathematics from Harvard University.

263