



## Fall 2023 Colloquium

Department of Computer and Information Sciences

### *Puzzles for Science and Honest Commerce*

**Dr. Dennis Shasha**

Julius Silver Professor

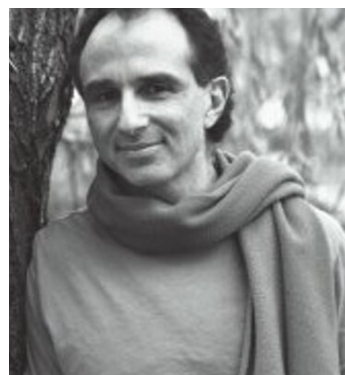
Department of Computer Science

Courant Institute of New York University

**Wednesday, November 8, 11AM, SERC 306**

#### **Abstract:**

In my research, I solve puzzles for a living. Over the last few years, I've tried to make this activity useful to biologists, finance, and developing countries. This talk will give an overview of some of those attempts, involving the use of combinatorial design to reduce the size of experimental search spaces, an algorithm for banking between mutually suspicious agents over untrusted channels, and a method to ensure that drugs are not counterfeit.



#### **Bio:**

Dennis Shasha is a Julius Silver Professor of computer science at the Courant Institute of New York University and an Associate Director of NYU Wireless. He works on meta-algorithms for machine learning to achieve guaranteed correctness rates, with biologists on pattern discovery for network inference; on automated verification for concurrent algorithms; on a tool for policy planners facing epidemics; on tree and graph matching; on algorithms for time series for finance and migratory patterns; on database tuning; and on computational reproducibility. Because he likes to type, he has written six books of puzzles about a mathematical detective named Dr. Ecco, a biography about great computer scientists, a book about the future of computing, and technical books about data structures and energy-efficient blockchains.