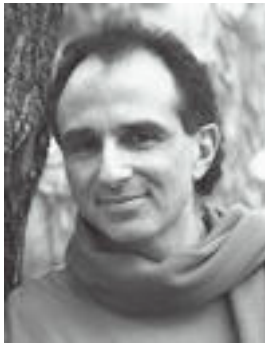




UPSTART PUZZLES

Tuesday November 7th
17h30 in Combes C14



Presented By

DENNIS SHASHA

Dennis Shasha is a professor of computer science at the Courant Institute of New York University where he works with biologists on pattern discovery for microarrays, combinatorial design, and network inference; with physicists, musicians, and financial people on algorithms for time series; and on database applications in untrusted environments. Other areas of interest include database tuning as well as tree and graph matching.

Because he likes to type, he has written five books of puzzles, a biography about great computer scientists, and technical books about database tuning, biological pattern recognition and time series. He has co-authored fifty journal papers, sixty conference papers, and nine patents. For fun, he writes the puzzle column for Scientific American. Until July of 2007, he is at INRIA, Rocquencourt (near Paris, France) with the group of Philippe Pucheral.

ABSTRACT

The writer of puzzles often invents puzzles to illustrate a principle. The puzzles, however, sometimes have other ideas. They speak up and say that they would be so much prettier as slight variants of their original selves.

The dilemma is that the puzzle inventor sometimes can't solve those variants. Sometimes he finds out that his colleagues can't solve them either, because there is no existing theory for solving them. At that point, these sassy variants deserve to be called upstarts.

We discuss a few upstarts inspired originally from the Falklands/Malvinas Wars, zero-knowledge proofs, hikers in Colorado, and city planning. They have given a good deal of trouble to a certain mathematical detective whom I know well.