



The Artificial Intelligence Lab at the Department of Computer Science of the University of Nicosia hosts:

PROFESSOR DENNIS SHASHA
NEW YORK UNIVERSITY
**“THE CHANGING NATURE
OF INVENTION IN
COMPUTER SCIENCE”**

22 January 2018
16:00

UNESCO Amphitheatre

THE TALK IS OPEN TO THE PUBLIC

What drives inventions in computing?

Necessity seems to play only a minor role. Anger at the way things are is much more powerful, because it leads to easier ways to work (the invention of new computer languages). A general dissatisfaction with the practical or theoretical structure of the world can open up whole new approaches to problems (complexity theory and cryptography). Finally, a genuine collaboration between people and machines can lead to an entirely new kind of engineering for devices that will travel to far-off planets or to hostile environments.

The talk will discuss the work of several inventors in computing and engineering, their inventions, and how they came up with them and how they plan to come up with more in the future. The ensuing discussion will address the fundamental nature of invention in a world partly populated by intelligent machines.



PROFESSOR DENNIS SHASHA NEW YORK UNIVERSITY

BIOGRAPHY

Dennis Shasha is a 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; with computational chemists on algorithms for protein design; with physicists and financial people on algorithms for time series; on clocked computation for DNA computing; and on computational reproducibility. Other areas of interest include database tuning as well as tree and graph matching. 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, and a book about the future of computing.

He has also written five technical books about database tuning, biological pattern recognition, time series, DNA computing, resampling statistics, and causal inference in molecular networks.

He has co-authored over eighty journal papers, seventy conference papers, and twenty-five patents. He has written the puzzle column for various publications including Scientific American, Dr. Dobb's Journal, and the Communications of the ACM. He is a fellow of the ACM and an INRIA International Chair.