

Franco Sirovich - Curriculum vitae

Franco Sirovich, born in Florence (Italy) July 8, 1943; graduated in Electronic Engineering in 1967 at the Polytechnic of Milan (Italy).

Post-graduate studies with the National Research Council at the Institute for Information Processing in Pisa. In 1969 received an appointment with the National Research Council at the Institute for Information Processing.

From September 1971 to February 1973 was Visiting Research Associate at the Computer Science Dept., Carnegie- Mellon University, Pittsburgh (USA). From October 1979 to December 1981 was with the Ing. C. Olivetti & C. SpA as Project Leader with the Applied System Research Division and with the Word Processing and Office Automation Division.

In 1981 won a chair at the University of Turin and since January 1982 is Full Professor at the same University, where he has been teaching several courses in areas such as Operating Systems, Computer Architecture, Internet Infrastructure, Internet Application Protocols.

Research Activity

Franco Sirovich has been active in many areas of Computer Science

Pattern Recognition and Artificial Intelligence

Linguistic methods for description of complex images. Automatic learning of heuristics. Data structures for complex semantic contexts representations. Associative information retrieval in long term memory.

Combinatorics

Graph isomorphism algorithms. Relationship between heuristic search and formal language theory.

Theory of Programming and Programming Systems

Artificial Intelligence programming system based on an extension of LISP. Pattern matching languages and call by pattern. Programming systems for the design, development and verification of large programs. Symbolic execution and abstract data types. Program development tools based on top-down development by levels of abstractions. Distributed systems.

Semantics of Programs

Methods for describing the semantics of programming languages with procedural semantics. Equivalence between procedural semantics and symbolic logic. Program verification and symbolic execution. Decidability of the equivalence problem for recursive functions.

Office Information Systems

Form systems. Document retrieval. Access control models. Daemon-based programming systems for office procedures.

Computer Networks

Directory systems. Network management. Service Level Agreements. Messaging systems.