IMT
INSTITUTE
FOR ADVANCED
STUDIES
LUCCA

Laudatio for Ugo Montanari

in occasion of his Honorary Doctorate Award at IMT

by
Rocco De Nicola

March 26, 2014

Who is Ugo Montanari

1. 1966: Laurea in Electronic Engineering at Politecnico di Milano
2. 1967 - 1970: Visiting Scientist in USA: Maryland, Stanford, Berkeley and Carnegie Mellon
3. 1970 - 1975 Researcher at IEI-CNR, where Computer Science in Italy started
4. 1969 - : Lecturer for the Degree in Scienze dell'Informazione, the first Degree in Computer Science in Italy
5. 1975 - : Full Professor at Dip. Informatica of Pisa University
   - Director of studies of the Pisa PhD program in Computer Science for 8 years
   - Head of the Department in 2002-2006,
6. 2005 - : Visiting professor at IMT: Helped to found, and chaired the PhD school of CSE until 2011
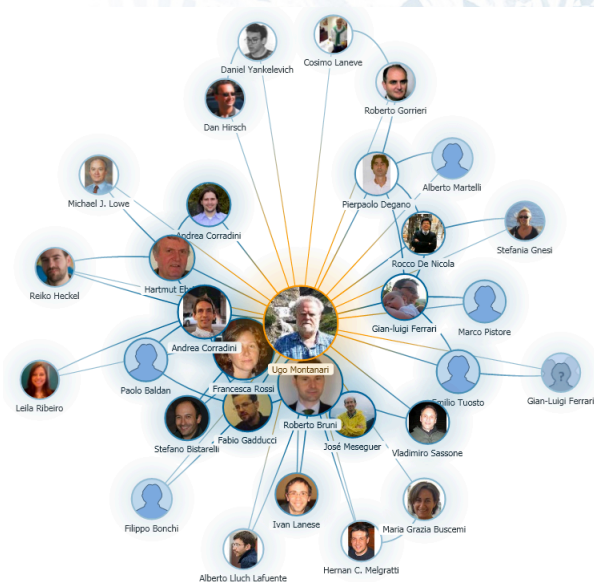7. 2014: Emeritus Professor at Pisa University

Montanari's Services

- Coordinator of Progetto Finalizzato Informatica of CNR (1979-1985)

- Co-founded CINI, the Italian inter-university consortium on informatics, director 1986-1994

- Contributed to the creation and development of ESLAI, Escuela Latino Americana de Informtica (1984-1991)

- Vice-chairman for MIUR of the committee for the Italian Research Program in Informatics (1991-1993)

- Member of the scientific and review boards of several research and funding institutions (INRIA, Swedish Research Council, Dutch NWO, CSELT, CNR, . . .).

- Member of Academia Europaea

- Member of Gruppo 2003 per la Ricerca Scientifica

Research Topics

- Image processing and artificial intelligence
  - hidden lines elimination for three-dimensional graphics
  - applications of dynamic programming to picture processing
- Logic and constraint programming
  - unification algorithm for logic programming, but also of unification theory
  - (soft) constraint programming with optimizations and probabilities
- Graph transformations
  - synchronized graph rewriting
  - graph transformation systems as models of concurrency
- Concurrency theory
  - partial order and causal semantics of concurrent processes
  - (categorical) concurrent models of computation

Some Numbers

- More than 300 published papers
  - first journal paper on constraint programming (1272 citations)
  - first paper on final semantics in abstract data types
  - the Martelli-Montanari unification algorithm (913 citations)
  - categorical models of Petri nets (453 citations)
- Among the world's top nurturers
  - More than 20 PhD students plus other pupils
  - In a 2004 report by the Indian Institute of Science, he ranked 7th worldwide (1st in Europe) in the publication count of top nurturers and their students.

F. Pammolli - IMT founding director

"I pensieri più cari e riconoscenti al Professor Ugo Montanari, in questo giorno. È un onore per IMT poter assegnare questo riconoscimento. Ed è un onore per IMT aver potuto contare, nella fase decisiva della sua nascita, sul contributo di Ugo Montanari, sia come coordinatore del programma di dottorato in Computer Science and Engineering, sia come Vice Direttore"