# **Lavinia Egidi**

# Curriculum vitae

#### **BIO AND EDUCATION**

She has a Master Degree in Mathematics from the University of Rome La Sapienza and a PhD in Computer Science from the Universities of Turin and Milan. She is currently associated Professor at this University and a member of the Computer Science Institute of the Department of Sciences and Techmological Innovation. In her career she has been working on lambda-calcolus, complexity of logical theories, network security, knowledge representation and approximated pattern matching.

#### **UNIVERSITY CAREER**

2006-	Associate Professor, Università degli Studi del Piemonte Orientale
1998-2006	Researcher, Università degli Studi del Piemonte Orientale
1993-1998	Researcher, Università degli Studi di Torino

#### **M**AIN FIELDS OF INTEREST

- 1. Approximate pattern matching
- 2. Security

## **CURRENT ISSUES OF RESEARCH**

# 1. Algorithms for approximate Pattern

Use of spaced seeds for the detection of substrings

## 2. User authentication based on distribution of secrets

Application of techniques of secret sharing and multiparty computation to user authentication

## **TOP FIVE PAPERS**

- 1. L. Egidi, G. Manzini, Design and analysis of periodic multiple seeds, Theoretical Computer Science 522 (2014)
- 2. L. Egidi, G. Faglia, Double Exponential Inseparability of Robinson's Subsystem Q+, *J. Symbolic Logic* Volume 76, Issue 1 (2011)
- 3. L.Egidi, M.Furini, From Digital Audiobook to Secure Digital Multimedia-book, *ACM Computers in Entertainment*, Vol. 4, No. 3, July 2006.
- 4. L. Egidi, P. Terenziani, A mathematical framework for the semantics of symbolic languages representing periodic time, *Annals of Mathematics and Artificial Intelligence*, 46(3): 317-347, 2006
- 5. L. Egidi "A quantifier elimination for the theory of *p*-adic numbers" *Computational Complexity*, **7**, 1998, 205-263.