

Silviu Maniu

CONTACT INFORMATION

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RESEARCH INTERESTS

Data management and mining: algorithms and data structures for uncertain and social data management, big Web data, databases, crowdsourcing.

CURRENT POSITION

Université Paris Sud, Orsay, France *Associate Professor* **September, 2015 – present**

Research-wise, I am attached to the Laboratoire de Recherche en Informatique (LRI), a CNRS - Univ. Paris-Sud joint research laboratory (UMR 8623). Within LRI, I am part for the LaHDAK team, which performs research on data-related issues (databases, Big Data, ontologies).

My teaching is done in the Computer Science department of the Faculty of Sciences in Univ. Paris-Sud.

EDUCATION

Télécom ParisTech (formerly known as École Nationale Supérieure des Télécommunications), Paris, France

Ph.D., Computer Science, September 2009 - October 2012

- Thesis title: “Data Management in Social Networks”
- Advisors: Bogdan Cautis and Talel Abdesslem
- Distinction: Très Honorable (honors)

Main research areas:

- development of algorithms for efficient personalized information retrieval for today’s social networks, containing millions of users,
- extraction and analysis of the first large scale network of trust interactions between contributors of Wikipedia articles.

Politehnica University, Timisoara, Romania

Dipl.-Ing., Computer Science, June, 2005

- Thesis title: Framework for the formal verification of Java programs
- Advisor: Marius Minea

PREVIOUS POSITIONS

Huawei Noah’s Ark Lab, Hong Kong *Researcher* **November, 2014 – August, 2015**

Research in big data and distributed data mining in the Large-scale Data Mining and Machine Learning group.

The University of Hong Kong, Hong Kong

Postdoctoral Fellow

October, 2012 – October, 2014

Involved in research in the Databases group of the Computer Science department, supervised by Dr. Reynold C. K. Cheng.

- performing research in databases and the Web, with a focus on the management of uncertain data in large networks,
- supervising and assisting students at the M.Phil. and Ph.D. level in research topics related to crowdsourcing, link prediction in heterogeneous networks, and influence propagation in social networks.

Yahoo! Research, Barcelona, Spain *Research Intern*

June, 2012 – August, 2012

Involved in research in the Social Media Engagement group.

- analysis of the search behaviour of users of a popular photo sharing platform.

Télécom ParisTech, Paris, France *Teaching Assistant*

December, 2010 – June, 2012

Involved in computer lab exercises and project work.

- topics: Introduction to Databases, Advanced Databases, Web Engineering

Alcatel-Lucent, Timisoara, Romania / Paris, France / Stuttgart, Germany

Software Engineer

July, 2005 – August, 2009

Development and software integration projects in the area of customer billing and network management for several international telecommunications operators.

TEACHING

Université Paris-Sud, 2015—present, 192 hours/year

- *Teaching Responsibilities:* Co-responsible, M2 Data and Knowledge (U. Paris-Saclay) 2015–present; Responsible, Master Cloud Computing and Services in the EIT MasterSchool (U. Paris-Sud)
- *M2 Data and Knowledge:* courses Complex Data and Knowledge, Uncertain Data Management
- *M1 Computer Science, L3 Computer Science:* practical classes for Databases and Advanced Databases courses.

Télécom ParisTech, 2010—2012, 64 hours/year

- *INF225 Introduction to Databases:* teaching assistant, lab work,
- *INF345 Advanced Databases:* teaching assistant, lab work, project work,
- *ATHENS Web Search:* lab work.

University of Hong Kong, 2012—2014

- informal supervision of M.Phil. students (3 students) and Ph.D. students (2 students) with Dr. Reynold C.K. Cheng.

MAIN

PUBLICATIONS

I have authored and published around 15 papers in the fields of social data management, uncertain data, big data mining, and crowdsourcing.

The full list, along with the full text of all my publications can be found at <http://silviu.maniu.info/publications>; a list with citations is available at <https://scholar.google.com/citations?user=dZqFyeMAAAAJ>.

S. Lei, S. Maniu, L. Mo, R. Cheng, P. Senellart. Online Influence Maximization. 2015. *Proc. ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*.

G. Gouriten, S. Maniu, P. Senellart. Scalable, generic, and adaptive systems for focused crawling. 2014. *Proc. ACM Hypertext Conference (HT)*. **Best Paper Award**

S. Maniu, R. Cheng, P. Senellart. ProbTree: a query-efficient representation of probabilistic graphs. 2014. *SIGMOD Workshop on Big Uncertain Data (BUDA)*.

S. Maniu, B. Cautis. Network-aware search in social tagging applications: Instance optimality versus efficiency. 2013. *Proc. Conf. Information and Knowledge Management (CIKM)*.

S. Maniu, B. Cautis. Context-aware top-*k* processing using views. 2013. *Proc. Conf. Information and Knowledge Management (CIKM)*.

S. Maniu, B. Cautis, and T. Abdesslem. Building a signed Network from interactions in Wikipedia.

2011. *Proc. SIGMOD Workshop on Databases and Social Networks (DBSocial)*.

AWARDS

SIGWEB Douglas Engelbart Best Paper Award, at the ACM Hypertext 2014 conference.

GRANTS

Co-Investigator - Effective Noise Removal Algorithms for Ambiguous Databases. 2014—2015. HKU Internal Grant “Seed Funding Programme for Basic Research”, ref 201311159095. PI: R. Cheng. Amount HKD 47,900.

Co-Investigator - Query-Efficient Representations of Uncertain Graphs. 2013—2014. HKU Internal Grant “Seed Funding Programme for Basic Research”, ref 201211159083. PI: R. Cheng. Amount HKD 154,200.

Co-Investigator - Inferring Signed Networks in Wikipedia. 2012—2013. Amazon AWS in Education research grant. PI: B. Cautis. Amount USD 7,500.

Collaborator - French ANR project ALICIA 2015—present. EU FP7 project ARCOMEM 2011—2013. French ANR project ISICIL 2009—2010.

SCIENTIFIC SERVICE

PC member: SIGMOD 2016, 2015; SSDBM 2016; SUM 2016; ECML PKDD 2016, 2015 (industrial track); DASFAA 2015; UnCrowd 2014; DBCrowd 2013.

Scientific Committees: Research Initiative in Industrial Data Science (U. Paris-Saclay) 2016.

Reviewer: IEEE TKDE; ARS 2016.

Guest co-Editor: DAPD Journal, Special Issue on Databases and Crowdsourcing.

External Reviewer: PVLDB, SIGMOD, ICDE, IJCAI, ICDT, KDD, EDBT, DASFAA.

TECHNICAL SKILLS

Development: C/C++, Java, Python, Scala, shell

Distributed computing: Apache Hadoop, Pig, HBase, Spark

Numerical and statistical computing: Matlab, R

Other: Unix/Linux variants, L^AT_EX, office tools.

LANGUAGES

English (fluent), French (fluent), Romanian (native)