

# Michael Sioutis

## Curriculum Vitae

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“Μανθάνων μὴ κάμνε”

### Personal Information

Father's Name Ioannis  
Date of Birth September 15, 1986  
Place of Birth Wiede, Germany  
Nationality Hellenic  
Status Single

### Education

2013-present **Doctor of Computer Science**, University of Artois, Center of Research in Computer Science of Lens, France.  
Area of study Qualitative Spatio-Temporal Reasoning  
Advisors Prof. Bertrand Mazure, Prof. Jean-François Condotta, Asst. Prof. Yakoub Salhi  
2009-2012 **Master of Advanced Information Systems**, National and Kapodistrian University of Athens, Department of Informatics and Telecommunications, Greece.  
- Major in Artificial Intelligence, overall GPA: 8.3/10.0.  
— MASTER THESIS  
title *Consistency of Chordal Spatial Qualitative Constraint Networks*  
Supervisor Prof. Manolis Koubarakis  
2004-2009 **Bachelor of Informatics and Telecommunications**, National and Kapodistrian University of Athens, Department of Informatics and Telecommunications, Greece.  
- Major in Information Systems, overall GPA: 7.8/10.0.  
— UNDERGRADUATE THESIS  
title *Weighted Constraint Satisfaction Problems*  
Supervisor Asst. Prof. Panagiotis Stamatopoulos  
2001-2004 **Lyceum Apolytirion**, 2nd Unified Lyceum of Paleo Faliro, Athens, Greece.  
- Information Science and Service Course, overall GPA: 19.2/20.0.

### Fields of Interest

- Artificial Intelligence
- Data Mining
- Linux System Engineering
- Logic Programming
- Semantic Web

## Experience

- 2013-present **Doctoral Researcher, Software Development and Research**, University of Artois, Center of Research in Computer Science of Lens, France.  
- Pursuing a PhD in the area of Artificial Intelligence from 1<sup>st</sup> October 2013.
- 2015-2016 **Visiting Research Student, Software Development and Research**, University of Technology Sydney, Centre for Quantum Computation & Intelligent Systems, Australia.  
- Was offered an honorary appointment as a Visiting Research Student at the University of Technology Sydney under the supervision of Prof. Sanjiang Li from 2<sup>nd</sup> December 2015 to 6<sup>th</sup> January 2016.
- 2012-2013 **Research and Linux Systems Engineer, Linux System Administration, Software Development, Research, and NOC administration**, Pierre & Marie Curie University, Computer Science Laboratory of Paris 6, France.  
- Served as a system administrator for PlanetLab Europe (<http://www.planet-lab.eu/>) and as a research engineer for the European funded FP7 project Fed4FIRE (<http://fed4fire.eu/>) from 1<sup>st</sup> October 2012 to 30<sup>th</sup> September 2013.
- 2010-2012 **Research Assistant, Software Development, Research, and Website Administration**, National and Kapodistrian University of Athens, Department of Informatics and Telecommunications, Greece.  
- Served as a research assistant for the European funded FP7 project TELEIOS (<http://www.earthobservatory.eu>) from 1<sup>st</sup> September 2010 to 30<sup>th</sup> September 2012.

## Teaching Assistantship

- 2015-2016 **Databases and Network Security Courses**, University Institute of Technology of Lens, Department of Lifelong Learning, France.  
- Led undergraduate courses on Databases (<http://www.cril.fr/~sioutis/DB/>) and Network Security (<http://www.cril.fr/~sioutis/ITSecurity/>).
- 2015-2016 **Introduction to Databases Lab**, University Institute of Technology of Lens, Department of Computer Science, France.  
- Provided assistance to undergraduate students on SQL programming for the Introduction to Databases course.
- 2013-2014 **Databases and Network Security Courses**, University Institute of Technology of Lens, Department of Lifelong Learning, France.  
- Led undergraduate courses on Databases (<http://www.cril.fr/~sioutis/DB/>) and Network Security (<http://www.cril.fr/~sioutis/ITSecurity/>).
- 2011-2012 **Python Tutorial**, National and Kapodistrian University of Athens, Department of Informatics and Telecommunications, Greece.  
- Introduced Python as the language of choice for the Artificial Intelligence course and provided lectures and assistance to undergraduate students on Python programming in the context of this course (<http://cgi.di.uoa.gr/~ys02>).
- 2009-2012 **Artificial Intelligence Tutorial**, National and Kapodistrian University of Athens, Department of Informatics and Telecommunications, Greece.  
- Provided lectures and assistance to undergraduate students on constraint programming techniques for the Artificial Intelligence course (<http://cgi.di.uoa.gr/~ys02>).
- 2009-2010 **Introduction to Programming Lab**, National and Kapodistrian University of Athens, Department of Informatics and Telecommunications, Greece.  
- Provided assistance to undergraduate students on procedural programming techniques for the Introduction to Programming course (<http://cgi.di.uoa.gr/~ip/>).

## Computer Skills

### Operating Systems

Unix-like Linux, BSD Unix, Mac OS, Solaris

Other Microsoft® Windows

### Programming Languages

Imperative C

Multiparadigm Python, C++, Java, Logo, Perl

Logic Prolog

Query SQL, SPARQL

Scripting Bourne shell, Bash, JavaScript

Web HTML

Ontology RDF Schema, OWL

### Tools/Libraries

Constraint ECLIPSe, python-constraint

Administration Nagios, Cacti, Apache HTTP Server, Apache Tomcat, phpMyAdmin

Database PostgreSQL+PostGIS, MySQL, MonetDB, SQLite

VCS Mercurial, Subversion, Git

Virtualization VirtualBox, Linux-VServer, KVM

Productivity TeX, LATEX, Microsoft Office, OpenOffice, LibreOffice

## Languages

Greek **Superior**

*Native Language*

English **Proficient** *Certificate of Proficiency in English (University of Cambridge), Dec 2001  
Certificate of Proficiency in English (University of Michigan), Mar 2002*

German **Intermediate** *Zentrale Mittelstufenprüfung (Goethe Institute), Jun 2003*

French **Elementary**

## Selected Publications

### Journal Papers

Artificial Intelligence M. Sioutis, Y. Salhi, and J.-F. Condotta: *Studying the Use and Effect of Graph Decomposition in Qualitative Spatial and Temporal Reasoning*. KER, 2016. (**In press.**)

Artificial Intelligence M. Sioutis, J.-F. Condotta, and M. Koubarakis: *An Efficient Approach for Tackling Large Real World Qualitative Spatial Networks*. IJAIT, 2015.

Artificial Intelligence M. Sioutis: *Consistency of Chordal Spatial Qualitative Constraint Networks*, NKUA-DIT Selected Graduate and Undergraduate Theses, 2013.

### Conference Papers

Artificial Intelligence M. Sioutis, Z. Long, and S. Li: *Efficiently Reasoning about Qualitative Constraints through Variable Elimination*. In SETN 2016, Thessaloniki, Greece.  **Best paper award!**

Artificial Intelligence Z. Long, M. Sioutis, and S. Li: *Efficient Path Consistency Algorithm for Large Qualitative Constraint Networks*. In IJCAI 2016, New York City, USA.

- Artificial Intelligence J.-F. Condotta, I. Nouaouri, and **M. Sioutis**: *A SAT Approach for Maximizing Satisfiability in Qualitative Spatial and Temporal Constraint Networks*. In KR 2016, Cape Town, South Africa.
- Artificial Intelligence J. H. Lee, S. Li, Z. Long, and **M. Sioutis**: *On Redundancy in Simple Temporal Networks*. In ECAI 2016, The Hague, Holland.
- Artificial Intelligence J.-F. Condotta, A. Mensi, I. Nouaouri, **M. Sioutis**, and L. B. Said: *Local Search for Maximizing Satisfiability in Qualitative Spatial and Temporal Constraint Networks*. In AIMA 2016, Varna, Bulgaria.
- Artificial Intelligence **M. Sioutis**, S. Li, and J.-F. Condotta: *Efficiently Characterizing Non-Redundant Constraints in Large Real World Qualitative Spatial Networks*. In IJCAI 2015, Buenos Aires, Argentina.
- Artificial Intelligence **M. Sioutis**, Y. Salhi, and J.-F. Condotta: *On the Use and Effect of Graph Decomposition in Qualitative Spatial and Temporal Reasoning*. In SAC 2015, Salamanca, Spain.
- Artificial Intelligence **M. Sioutis**, Y. Salhi, and J.-F. Condotta: *A Simple Decomposition Scheme for Large Real World Qualitative Constraint Networks*. In FLAIRS 2015, Hollywood, Florida, USA.
- Automated Reasoning **M. Sioutis**, J.-F. Condotta, Y. Salhi, and B. Mazure: *Generalized Qualitative Spatio-Temporal Reasoning: Complexity and Tableau Method*. In TABLEAUX 2015, Wroclaw, Poland.
- Artificial Intelligence **M. Sioutis**, J.-F. Condotta, Y. Salhi, B. Mazure, and D. A. Randell: *Ordering Spatio-Temporal Sequences to meet Transition Constraints: Complexity & Framework*. In AIAI 2015, Bayonne/Biarritz, France.
- Artificial Intelligence Y. Salhi, and **M. Sioutis**: *A Resolution Method for Modal Logic S5*. In GCAI 2015, Tbilisi, Georgia.
- Artificial Intelligence J.-F. Condotta, A. Mensi, I. Nouaouri, **M. Sioutis**, and L. B. Said: *A Practical Approach for Maximizing Satisfiability in Qualitative Spatial and Temporal Constraint Networks*. In ICTAI 2015, Vietri sul Mare, Italy.
- Artificial Intelligence **M. Sioutis**: *Triangulation versus Graph Partitioning for Tackling Large Real World Qualitative Spatial Networks*, In ICTAI 2014, Limassol, Cyprus.
- Artificial Intelligence **M. Sioutis**, and J.-F. Condotta: *Tackling Large Qualitative Spatial Networks of Scale-Free-Like Structure*, In SETN 2014, Ioannina, Greece.
- Artificial Intelligence **M. Sioutis**, and J.-F. Condotta: *Vertex Incremental Path Consistency for Qualitative Constraint Networks*, In SETN 2014, Ioannina, Greece.
- Artificial Intelligence **M. Sioutis**, and J.-F. Condotta: *Incrementally Building Partially Path Consistent Qualitative Constraint Networks*, In AIMA 2014, Varna, Bulgaria.
- Artificial Intelligence **M. Sioutis**, J.-F. Condotta, Y. Salhi, and B. Mazure: *A Qualitative Spatio-Temporal Framework Based On Point Algebra*, In AIMA 2014, Varna, Bulgaria.
- Knowledge Management P. Liakos, K. Papakonstantinopoulou, and **M. Sioutis**: *Pushing the Envelope in Graph Compression*, In CIKM 2014, Shanghai, China.
- Information Retrieval P. Liakos, K. Papakonstantinopoulou, and **M. Sioutis**: *On the Effect of Locality in Compressing Social Networks*, In ECIR 2014, Amsterdam, Netherlands.
- Artificial Intelligence N. Amaneddine, J.-F. Condotta, and **M. Sioutis**: *Efficient Approach to Solve the Minimal Labeling Problem of Temporal and Spatial Qualitative Constraints*, In IJCAI 2013, Beijing, China.

Internet Science	W. Vandenbergh, B. Vermeulen, P. Demeester, A. Willner, S. Papavassiliou, A. Gavras, <b>M. Sioutis</b> , A. Quereilhac, Y. Al-Hazmi, F. Lobillo, F. Schreiner, C. Velayos, A. Vico-Oton, G. Androulidakis, C. Papagianni, O. Ntofon, and M. Boniface: <i>Architecture for the Heterogeneous Federation of Future Internet Experimentation Facilities</i> , In FutureNetworkSummit 2013, Lisbon, Portugal.
Artificial Intelligence	<b>M. Sioutis</b> , and M. Koubarakis: <i>Consistency of Chordal RCC-8 Networks</i> , In IC-TAI 2012, Athens, Greece.
Databases	M. Koubarakis, <b>M. Sioutis</b> , K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, S. Vassos, G. Garbis, K. Bereta, C. O. Dumitru, D. Espinoza-Molina, K. Molch, G. Schwarz, and M. Datcu: <i>Building Virtual Earth Observatories using Ontologies, Linked Geospatial Data, and Knowledge Discovery Algorithms</i> . In OTM - ODBASE 2012, Rome, Italy.
Image Information Mining	M. Koubarakis, <b>M. Sioutis</b> , K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, S. Vassos, G. Garbis, K. Bereta, M. Datcu, G. Schwarz, C. O. Dumitru, D. Espinoza-Molina, and K. Molch: <i>Building Virtual Earth Observatories using Ontologies, Linked Geospatial Data, and Knowledge Discovery Algorithms</i> . In ESA-EUSC-JRC 2012, Oberpfaffenhofen, Germany.
Artificial Intelligence	M. Koubarakis, M. Karpathiotakis, K. Kyzirakos, C. Nikolaou, and <b>M. Sioutis</b> : <i>Data Models and Query Languages for Linked Geospatial Data</i> . In Reasoning Web 2012, Vienna, Austria.
Artificial Intelligence	M. Koubarakis, M. Karpathiotakis, K. Kyzirakos, C. Nikolaou, S. Vassos, G. Garbis, <b>M. Sioutis</b> , K. Bereta, D. Michail, C. Kontoes, I. Papoutsis, T. Herekakis, S. Manegold, M. Kersten, M. Ivanova, H. Pirk, Y. Zhang, M. Datcu, G. Schwarz, C. O. Dumitru, D. Espinoza-Molina, K. Molch, U. D. Giannatteo, M. Sagona, S. Perelli, E. Klien, T. Reitz, and R. Gregor: <i>Building Virtual Earth Observatories using Ontologies and Linked Geospatial Data</i> . In RR 2012, Vienna, Austria.
Image Information Mining	M. Koubarakis, K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, S. Vassos, G. Garbis, <b>M. Sioutis</b> , K. Bereta, C. Kontoes, I. Papoutsis, T. Herekakis, D. Michail, S. Manegold, M. Kersten, M. Ivanova, H. Pirk, Y. Zhang, M. Datcu, G. Schwarz, C. O. Dumitru, D. Espinoza-Molina, K. Molch, U. D. Giannatteo, M. Sagona, S. Perelli, T. Reitz, E. Klien, and R. Gregor: <i>Building Remote Sensing Applications Using Scientific Database and Semantic Web Technologies</i> . In ESA-EUSC-JRC 2012, Oberpfaffenhofen, Germany.
Engineering	C. Kontoes, I. Keramitsoglou, I. Papoutsis, T. Herekakis, D. Michail, P. Xofis, M. Koubarakis, K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, <b>M. Sioutis</b> , G. Garbis, S. Vassos, S. Manegold, M. Kersten, H. Pirk, and M. Ivanova: <i>Operational Wildfire Monitoring and Disaster Management Support Using State-of-the-art EO and Information Technologies</i> , In EORSA 2012, Shanghai, China.

## Workshop Papers

Network Analysis	P. Liakos, K. Papakonstantinopoulou, <b>M. Sioutis</b> , K. Tsakalozos, and A. Delis: <i>Pinpointing Influence in Pinterest</i> . In SoCI@IJCAI 2016, New York City, USA.
Semantic Web	<b>M. Sioutis</b> , S. Li, and J.-F. Condotta: <i>On Redundancy in Linked Geospatial Data</i> . In LDQ@ESWC 2015, Portorož, Slovenia.
Artificial Intelligence	<b>M. Sioutis</b> , J.-F. Condotta, Y. Salhi, and B. Mazure: <i>The Implication Of Patchwork And Compactness In Qualitative Spatio-Temporal Reasoning</i> . In STeDy@IJCAI 2015, Buenos Aires, Argentina.

- Artificial Intelligence **M. Sioutis**, J.-F. Condotta, Y. Salhi, and B. Mazure: *A Tableau Method For Generalized Qualitative Spatio-Temporal Reasoning*. In STeDy@IJCAI 2015, Buenos Aires, Argentina.
- Artificial Intelligence **M. Sioutis**, J.-F. Condotta, Y. Salhi, B. Mazure, and D. A. Randell: *On Ordering Spatio-Temporal Sequences To Meet Transition Constraints*. In STeDy@IJCAI 2015, Buenos Aires, Argentina.
- Artificial Intelligence M. Koubarakis, K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, **M. Sioutis**, S. Vassos, D. Michail, T. Herekakis, C. Kontoes, and I. Papoutsis: *Challenges for Qualitative Spatial Reasoning in Linked Geospatial Data*. In BASR@IJCAI 2011, Barcelona, Spain.

### Demo Papers

- Semantic Web K. Kyzirakos, M. Karpathiotakis, G. Garbis, C. Nikolaou, K. Bereta, **M. Sioutis**, I. Papoutsis, T. Herekakis, D. Michail, M. Koubarakis, and C. Kontoes: *Real Time Fire Monitoring Using Semantic Web and Linked Data Technologies*. In ISWC 2012, Boston, USA.
- Databases M. Koubarakis, K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, S. Vassos, G. Garbis, **M. Sioutis**, K. Bereta, D. Michail, C. Kontoes, I. Papoutsis, T. Herekakis, S. Manegold, M. Kersten, M. Ivanova, H. Pirk, Y. Zhang, M. Datcu, G. Schwarz, C. O. Dumitru, D. Espinoza-Molina, K. Molch, U. D. Giammatteo, M. Sagona, S. Perelli, T. Reitz, E. Klien, and R. Gregor: *TELEIOS: A Database-Powered Virtual Earth Observatory*. In VLDB 2012, Constantinople, Turkey.

### Posters

- Data Mining P. Liakos, K. Papakonstantinopoulou, **M. Sioutis**: *SiVaC: An Efficient Graph Compression Algorithm*. In WSDM Data Challenge 2013, Rome, Italy.  **Winning team!**
- Geoscience C. Kontoes, I. Papoutsis, D. Michail, T. Herekakis, M. Koubarakis, K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, **M. Sioutis**, G. Garbis, S. Vassos, I. Keramitsoglou, M. Kersten, S. Manegold, and H. Pirk: *Wildfire monitoring via the integration of remote sensing with innovative information technologies*. In EGU General Assembly 2012, Vienna, Austria.

### Theses

- Artificial Intelligence **M. Sioutis**: *Consistency of Chordal Spatial Qualitative Constraint Networks*, NKUA Grey Literature Digital Library, 2012.
- Artificial Intelligence **M. Sioutis**: *Weighted Constraint Satisfaction Problems*, NKUA Library of School of Science, 2009.

## Scientific Activities

- 2010–Present **Member of the Greek Python User Group (PUG)**.  
<http://python.org.gr/>
- 2015 **Local Organizer of the Advanced Course on AI (ACAI) school**.  
<http://www.cril.univ-artois.fr/acai15/>
- 2012–2013 **Member of the Laboratory of Information, Network and Communication Sciences (LINCS)**.  
<http://www.lin.cs.fr/>

2013 **Local Arrangements Chair of the 1<sup>st</sup> International Workshop on Internet Science and Web Science Synergies.**

<https://sites.google.com/site/inetwebsci13/>

2010–2012 **Member of the Management of Data and Information Knowledge Group (MADgIK).**

<http://www.madgik.di.uoa.gr/>

2012 **Session Chair of the 24<sup>th</sup> IEEE International Conference on Tools with Artificial Intelligence (ICTAI).**

<http://ictai12.unipi.gr/>

## Hobbies

- Travelling
- Programming
- Reading
- Research