Vasilis Vassalos

Associate Professor, Department of Informatics Athens University of Economics and Business

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Research Experience: Large scale Data Analysis, Data Integration, Domain Specific Languages for Data Management and Analysis (Optimization, Execution), Nontraditional information management (stream- and sensor-based systems, XML, text), Query optimization, Web based Information Systems, Big Data Mining

Major areas of research contributions

Data Integration, including languages, models, processing techniques, schema matching, schema mapping [2,4-8, 10-12, 14,15,20,22,27,31,36,37,41,43,46,47,49,50,53,56,64,65]

Processing and Optimization of queries on non-relational data (XML, streams, text) [5,7,9,11-13,16-19,21,23,24,26,28-30,32,33,35,36,38-48,51,58-64]

Work Experience

AUG 2009-PRESENT

Associate Professor, Department of Informatics, Athens University of **Economics and Business**

Conducting research and teaching in the areas of information and Web service integration, domain specific languages for data management and analysis, community databases, relational and XML query processing, sensor data management, data mining, ranked text querying, and medical data management

Leading teams on academic and industrial R&D projects. Currently/recently leads industrial R&D projects in HR/recruiting analytics, Big data in finance, news text analytics. Leads the Data integration activity in the EC-funded FET-Flagship "Human Brain Project"

Director of MSc in Data Science (first of its kind in Greece)

FEB 2013-MAY 2013

Visiting Professor, School of Computer and Communication Science, **EPFL**

Research in large scale data integration and in declarative optimization methods for distributed computing frameworks

SEPT 2012-AUG 2013

Member of Associated Educational Staff, Hellenic Open University

Teaching in the graduate program in Information Systems

SEPT 2011-AUG 2012

Member of Associated Educational Staff, Open University of Cyprus

Teaching in the graduate program in Information Systems.

SEPT 2010-JUN 2011

Member of Associated Educational Staff, Hellenic Open University

Teaching in the graduate program in Information Systems.

SEPT 2008-AUG 2010

Member of Associated Educational Staff, Open University of Cyprus

Teaching in the graduate program in Information Systems.

AUG 2007-FEB 2008 Visiting Professor, Computer Science and Engineering Department, University of California, San Diego Research on XML data processing and full text query optimization AUG 2004-MAY 2008 Member, Board of Directors, Greek Observatory for the Information Society The Observatory was the designated public organization for studying ICT adoption in Greece and proposing measures for its increase. Responsible for the creating the organizational chart and recruiting the first ever batch of researchers. Creator of the research plan of the organization (research studies being the main activity of the Observatory). Coauthor of the specifications of the first internal and external studies (external studies were tendered to the private sector.) SEPT 2004-JUN 2008 Member of Associated Educational Staff, Hellenic Open University Teaching in the graduate program in Information Systems. SEPT 2003-AUG 2009 Assistant Professor, Department of Informatics, Athens University of **Economics and Business** Conducting research and teaching in the areas of information and Web service integration, databases, XML processing, and the use of Internet technologies for business advantage. Jun 2002-Jun 2003 Executive Consultant, Enosys Software, Inc. Advising the executive team on corporate strategy and corporate development, responsible for standards strategy. Enosys was acquired by BEA Systems on July 2003. JAN 2000-JUN 2002 Founder, Chief Technology Officer and Director, Enosys Software, Inc. Enosys Software (né Enosys Markets) built the first end to end XML data integration platform. Under my guidance, the company raised over \$11 million of venture financing, filed for 3 patents in the area of XML data processing, integration and interfaces, completed the first release of the product and conducted successful trials with Fortune 500 customers. SEPT 1999-SEPT 2003 Assistant Professor, Department of Information Systems, Stern School of Business, New York University Conducting research and teaching in the areas of information integration, databases, and the use of Internet technologies for business advantage. FEB 1995-AUG 1999 Research Assistant, Database Group, Stanford University. Conducted research in the area of on-line integration of heterogeneous information sources (TSIMMIS project) and in the area of semistructured data (TSIMMIS and Lore projects).

Member of Technical Staff, AT&T Labs, Research.

Jun 1996-Aug 1996

Worked on the RaDaR project (a scalable architecture for a global web-

hosting service) with Dr. Michael Rabinovich.

JAN 1994-JUN 1994 Research Assistant (Thesis research), Electrical and Computer

Engineering Dept., NTUA.

Worked on congestion control problems for ATM communication

networks.

Jun 1993-Aug 1993 Summer Intern, Silicon Graphics Hellas.

Worked on the development of an application for the measurement of

human body voltage.

Education

JAN 2001 Ph.D. in Computer Science, Stanford University.

Dissertation Title: Querying Autonomous, Heterogeneous Information

Sources.

Advisor: J. D. Ullman

MAR 1998 M.S. in Computer Science, Stanford University.

GPA: 4.1 (out of 4)

AUG 1994 Diploma of Electrical and Computer Engineering, National Technical

University of Athens.

GPA: 9.79 (out of 10). CLASS RANK: 1.

Thesis Title: Buffer size and congestion control in ATM networks.

Thesis advisor: Prof. M.E. Anagnostou.

Teaching Experience

Athens University of Economics and Business

Introduction to Programming undergraduate course (2013-2015)

Web technologies and programming undergraduate course (2010-2012, 2016)

Web applications graduate course (2009-2016)

Database Systems I – required undergraduate course (2004- 2011)

Database Systems II – required graduate course (2003-Present)

Advanced Topics in Databases – graduate course (2004-2008, 2013-Present)

Information Systems in the Financial Sector – graduate course (2004)

Hellenic Open University and Open University of Cyprus (adult distance education)

Basic Specialization in Computer Science Theory and Software – graduate course Specialization in Software Engineering – graduate course

New York University

Information and Internet Technologies – MBA course (regular and intensive delivery) Technical Foundations of Information Systems – Ph.D. course

Database Systems – required undergraduate course

Stanford University

Research funding and selected consulting projects

2013-2023 (1st phase: 2013-2016, 2nd phase: 2016-2018)	«Human Brain Project», Flagship FET, AUEB funding (1 st phase: €210.000, 2 nd phase: €340.000) (research funding), Principal investigator
2015-2016	«Creation of data science demonstrations for business problems», funding €10.000 (industry funding), Principal investigator
2015-2016	«Extending Data Integration with Incremental Strategies and Access Control», AUEB basic research program, €15.000 (research funding), Principal investigator
2014-2015	«Extending Data Integration with Ontology Based Data Access», AUEB basic research program, €11.000 (research funding), Principal investigator
2013-2015	«Asset Allocation Optimization and Risk Management Software», Greece-Israel research collaboration action, €100.000 (research funding), Principal investigator
2012-2015	«Energy Efficiency of Road Networks and Vehicles (EERNV)», €185.691 (research funding), Principal investigator
2012-2015	«Linked Open Data Governance (LODGOV)», €376.750 (research funding)
2012-2015	«Real time management of complex streams (RECOST)», €273.280 (EXCELLENCE programme) (research funding)
2012-2015	«EICOS - foundations for perSOnalized Cooperative Information Ecosystems», €520.000 (research funding)
2011-2013	Two Ph.D. studentships, €45.000 each, HERACLITUS II state research programme.
2011-2012	«Collaborative Large Scale Conflict. Resolution in Online Databases (CoLaSCOR)», €8.750, AUEB-RC research grant, Principal investigator.
2010	«Study on the use and function of electronic catalog and yellow page software», €12.000, industry funding, Principal Investigator
2010—2011	"XQuery by the numbers: Cost-based optimization and execution for
	expressive queries and updates for XML (XQueryCost)", €8.750, AUEB-RC research grant, Principal investigator.
2009—2010	"Cost-based optimization of XML processing: Models, Algorithms and System Building," funding €8.650, AUEB-RC research grant, Principal investigator.
2007—2008	"Technical and content support for broadband.gr," funding €44.800, Principal investigator.

2007	"Multi-channel personalized delivery and mining of news content," funding €66.675, in cooperation with reporter.gr, Principal Investigator (research funding)
2006—2007	"Encouragement of entrepreneurial actions, innovative applications, and elective course: Additional actions," EPEAEK Programme
2006	"Study on the introduction of document management systems to the Greek public sector: Technical solutions and business process reengineering", funded by the General Secretariat of Public Administration and e-Government of the Ministry of the Interior and Public Administration
2005—2008	"Next-generation systems for data and web services integration," PENED 2003 program (GSRT funding), funding amount €179,200, Principal investigator (research funding)
2005	"Creation of Business and operations plan for participation of the National Center for Public Administration in the Information Society Operational Program"
2005—2007	"Knowledge integration from distributed, heterogeneous sources," PYTHAGORAS II Programme, funding amount €60.000, Principal Investigator (research funding)
2005	"Technology Consulting for the Special Management Agency for the Information Society Operational Programme," funding amount €33.000, Principal Investigator for AUEB
2005	"Action for the redesign of the undergraduate curriculum of the Informatics Department", EPEAEK program of the Ministry of Education
2004—2005	"Design of a national digital library for the National Documentation Center: Portal architecture, digital content organization, and national archive infrastructure", Principal investigator (research funding)
2004—2005	"FundsOne – Advanced System for automated management of alternative investments on the WWW", funding amount €17.610, programme for Support of Technological Innovation in New Enterprises (Greek Secretariat of Research and Technology), Principal Investigator (advanced development)
2004	"Strengthening entrepreneurship education at AUEB: educational material and course design", EPEAEK program of the Ministry of Education
2003—2004	"Data Integration on Mobile Networks", funding amount €38.150, GSRT Programme for Strengthening of Competitiveness (research funding)
2002	Digital Economy Initiative Grant, \$5.000, Stern School of Business, New York University

Honors and awards

2009	Best student paper award, ICDE 2009 (for publication [30] <i>Double Index Nested-loop Reactive Join for Result Rate Optimization</i> , coauthored with Ph.D. student Mihaela Bornea and colleagues.)
2007—2008	Marie Curie Outgoing International Fellowship: <i>Query processing and Integration for Semistructured data: advancing the frontier</i>
2007	Invited Speaker at the Symposium on Data and Services Integration (SDSI), VLDB 2007, Vienna
1996—1998	Lilian Voudouri Foundation, Merit Scholarship for Graduate Studies
1994—1996	Bodossaki Foundation, Merit Scholarship for Graduate Studies
1994—1995	Thomaidio Award to the best student in the NTUA.
1995	Award for excellence in Computer Science in memory of Ioannis Kollias, NTUA.
1991 - 1995	Greek National Scholarship Foundation Scholarships.
1991 - 1995	Technical Chamber of Greece Scholarships.
1992	N. Kritikos Award for outstanding achievement in math, NTUA.
1992	Language Study Fellowship, German Agency for Academic Exchange (DAAD).

Student advising

PhD students

Mihaela Bornea (primary advisor) (2006-2010) First employment: IBM Research Watson

Research Center

Haris Georgiadis (primary advisor) (2006-2010). First employment: Oxford University

Computing Lab

Dimitris Mavroidis (2005-2009)

Dimitris Vassilakis (2005-2009)

Nick Bosovic (primary advisor) (2010-)

Nantia Makrynioti (primary advisor) (2013-)

Kostis Karozos (primary advisor) (2014-)

Dimitris Pappas (primary advisor) (2015-)

Forty five (45) Master's student theses advised since 2004.

Ten (10) Undergraduate student theses advised since 2004

Talks and Presentations (since 1998, excluding conference paper presentations)

DEC 2015	"Data Integration in the Human Brain Project", keynote talk, 2nd Cloud
	Computing and Big Data Workshop, UBITAK BILGEM Information
	Technologies Institute (BTE), Turkey
FEB 2015	"Data Management Challenges in the Medical Informatics Platform of
	the Human Brain Project", invited talk, Department of Informatics,

University of Piraeus

	"Icin algorithms for streamed relations" initial talk EDEL DATA
MAY 2013	"Join algorithms for streamed relations", <i>invited talk</i> , EPFL, DATA group of Computer and Communication Sciences School
APR 2013	"Algebraic optimization of complex full text queries", <i>invited talk</i> , EPFL, DATA and DIAS group of Computer and Communication Sciences School
DEC 2010	"Semi-Streamed Index Join for Near-Real Time Execution of ETL Transformations", <i>invited talk</i> , LIP6, Machine Learning and Databases Group
ОСТ 2010	"Rewriting XPath Queries using views", 2-hour tutorial presented at BDA 2010: 26èmes Journées Bases de Données Avancées
DEC 2009	"Algebra-based cost optimization and execution for XPath", <i>invited talk</i> , INRIA Saclay, GEMO/LEO group
FEB 2009	"Double Index Nested-loop Reactive Join for Result Rate Optimization", <i>invited talk</i> , University of Cyprus
DEC 2007, JAN 2008	"Modelling Real P2P Networks: The Effect of Altruism", <i>invited talk</i> , Yahoo Research NY and CSE Department UCSD
ОСТ 2007	"Faster XPath processing on commodity relational system", <i>invited talk</i> , weekly database seminar, CSE Department, UCSD
SEPT 2007	"Faster XPath processing on commodity relational system", <i>invited talk</i> , CS Department and Calit2, UC Irvine
SEPT 2007	"Queries, schemas, and interfaces: a medley of recent information integration advances", <i>invited plenary talk</i> at the Symposium on Data and Services Integration (SDSI), VLDB 2007, Vienna
APR 2007	"Modeling real P2P networks: the effect of altruism," <i>invited talk</i> at the TUILES seminar, IOMS Department, Stern School of Business, New York University
SEPT 2006	"Novel XPath query processing techniques," <i>invited talk</i> , Database Group, Seoul National University, S. Korea
JAN 2006	"Faster XPath processing using primary path fragments," <i>invited talk</i> , Database Group, Columbia University
OCT 2004	"Telecommunications and the Internet", <i>invited lecture</i> in the Technology and Management track, Greek School of National Defense.
Jun 2004	Standards <i>panel</i> , "Everything you wanted to know about XQuery," panel at the XIME-P workshop, co-located with ACM SIGMOD '04
May 2004	"Data integration: Current State and Challenges", <i>invited talk</i> , Computer Science Department, TU Wien.
MAR 2004	"Distributed Management of Data and Services: the challenge of the web(s)", <i>panel organizer</i> and Chair at EDBT '04, Heraklion, Greece.
MAR 2004	"What's next in XML and Databases", <i>panelist</i> at the Workshop on Database Technologies for Handling XML Information on the Web, part of EDBT '04 workshops.
Jun 2003	"An introduction to metadata management with RDF technologies", seminar at the Information Retrieval Lab, Department of Informatics,
FEB 2003	Athens University of Economics and Business AUEB). "XQuery Data Integration: Current State and Challenges", <i>invited talk</i> , Distinguished Speaker Series, Rutgers Electronic Commerce Association, Rutgers University.
JUL 2002	"Declarative specification of XML Query interfaces and Web Services", <i>invited talk</i> , Department of Computer Science, ETH Zürich.
FEB 2002	"XML Integration and XQuery processing", <i>invited talk</i> , Courant Institute, New York University.

JAN 2002	"XML Integration and XQuery processing", <i>International Research Seminar</i> , Department of Management Science and Technology, AUEB. "Data Integration with XML Views", <i>tutorial</i> , XML 2001 conference,
DEC 2001	Orlando, FL.
JUL 2001	"XML Query Forms (XQForms): Declarative Specification of XML Query Interfaces," <i>invited talk</i> , University of California, Riverside.
May 2000	"Information Integration for Electronic Commerce," talk at the <i>Information for Managerial Decision Making</i> workshop, Stern School of Business, NYU.
FEB 2000	"A TSIMMIS Retrospective." <i>Database Systems Seminar</i> , Department of Computer Science, Columbia University.
DEC 1999	"Search and Mediation on the Web." <i>Information Systems Seminar</i> , Stern School of Business.
Mar 1999–Apr 1999	"Querying Autonomous, Heterogeneous Information Sources," <i>talk</i> given at New York University Stern School of Business, Cambridge University Computer Laboratory, and the Computer Science Department of UC Santa Cruz.
SEP 1998	"Query Processing Algorithms for TSIMMIS," <i>talk</i> given at the annual Stanford Database Group Workshop.

Academic Activities

- Program Director, MSc in Data Science, AUEB (2015-)
- Director, Practical Training Program, Department of Informatics (2009-)
- Member, PhD Program Committee, Department of Informatics (2009-2011, 2014-)
- Member, Steering Committee, MSc in Computer Science, AUEB (2013-)
- Member, Basic Research Funding Committee, AUEB Research Center (2010-2012)
- Program Committee Chairmanships
 - o 14th International Workshop on the Web and Databases (WebDB 2011)
 - o 11th Hellenic Data Management Symposium (HDMS 2012)
- Program Committee memberships
 - o ACM Conference on Management of Data (SIGMOD 2017)
 - Very Large Database Conference (VLDB 2016)
 - o International Conference on Data Engineering (ICDE 2016)
 - Conference on Information and Knowledge Management (Knowlede Management Track)
 (CIKM 2014, 2016)
 - o ACM Conference on Management of Data (SIGMOD 2014, SIGMOD 2015)
 - Very Large Database Conference (VLDB 2015)
 - o Extending Database Technology Conference (EDBT 2015 Demo track),
 - o Workshop on the Web and Databases (WebDB 2015)
 - o Conference on Information and Knowledge Management (CIKM 2014)
 - o Extending Database Technology Conference (EDBT 2013, 2014)
 - o ACM Conference on Management of Data (SIGMOD 2013, Group Leader)
 - International Conf. on Database Systems for Advanced Applications (DASFAA 2013)
 - o ACM Conference on Management of Data (SIGMOD 2012)

- Extending Database Technology Conference (Demo PC) (EDBT 2012, 2011)
- o International Conference on Data Engineering (ICDE 2011)
- o Mobile Data Management Conference (MDM 2011)
- o Mobile Data Engineering Workshop (MobiDE 2010)
- o ACM Conference on Management of Data (Demo PC) (SIGMOD 2010)
- World Wide Web Conference (WWW 2010)
- International Conf. on Database Systems for Advanced Applications (DASFAA 2010)
- Extending Database Technology Conference (EDBT 2010)
- o International Conference on Data Engineering (ICDE 2010)
- o Mobile Data Management Conference (MDM 2010)
- o Hellenic Data Management Symposium (2005, 2006, 2007, 2008, 2009, 2010)
- o Very Large Database Conference (IIS PC) (VLDB 2009)
- o Extending Database Technology Conference (EDBT 2009)
- o International Conference on Data Engineering (ICDE 2009)
- Very Large Database Conference (Demo PC) (VLDB 2008)
- o Workshop on Mobile Data Management (MOBIDE 2008)
- ACM Conference on Management of Data (SIGMOD 2008)
- Extending Database Technology Conference (EDBT 2008)
- o International Conf. on Database Systems for Advanced Applications (DASFAA 2008)
- Very Large Databases Conference (VLDB 2007)
- o International workshop on Web Information and Data Management (WIDM 2007)
- o International Workshop on the Web and Databases (WebDB 2007)
- o International Conference on Data Engineering (ICDE 2003, 2004, 2006),
- International Conference on Database Systems for Advanced Applications (DASFAA 2006, 2007)
- o DataX Workshop (2005,2006)
- International workshop on Web Information and Data Management (WIDM 2002, 2003, 2004, 2005)
- o Conference on Information and Knowledge Management (CIKM 2004)
- o XML Symposium (XSym'04, '06)
- o International Conference on Electronic Commerce (ICEC 2003)
- o International Conference on Database Theory (ICDT 2003)
- o International Workshop on the Web and Databases (WebDB 2002)
- o ACM International Workshop on Data Warehousing and OLAP (DOLAP 2002).
- Sponsorship Co-Chair, SIGMOD 2011, SIGMOD 2012. SIGMOD 2012 set a record for SIGMOD sponsorship amount.
- Undergraduate Scholarship Program co-Chair, SIGMOD 2006
- Theme co-chair, Hypertext and Information Retrieval, 16th ACM Conference on Hypertext and Hypermedia (HT'05)
- Organizing Committee Chair for the Computer Science Symposium for J.D. Ullman's 60th birthday
- Member of the Advisory Committee of the World Wide Web Consortium (W3C), 2000-2003
- Member of the W3C XML Query Working Group, 2000-2003
- Reviewer for ACM Transactions on Database Systems (TODS), IEEE Transactions on Knowledge and Data Engineering, Very Large Databases Journal (VLDB J.) Information Systems, Data and Knowledge Engineering, Data and Knowledge Mining Journal, Journal of Intelligent Information Systems, ACM Principles of Database Systems Conf. (PODS).

Professional and social activities

- Member, Scientific Committee on Electronic Communications, Ministry of Transport and Communications (2008-2009)
- Member, Board of Advisors, LingoSpot, Inc (Los Angeles, CA) (2007-2009)

- Chartered Engineer, member of Technical Chamber of Greece.
- Consultant to various state bodies and public companies on issues of IT investments, intellectual
 property, business process re-engineering, document management, digital libraries, and other
 issues (2004-)
- Member, Board of Directors, Stanford Club of Greece (2007-)

Foreign Languages

English, French, German.

Personal Information

Greek citizen, US permanent resident.

Bibliography

A. Theses and dissertations

1. V. Vassalos. "Buffer Size and Congestion Control in ATM Networks"; Diploma Thesis, National Technical University of Athens Technical Report, August 1994.

DIPLOMA THESIS

2. V. Vassalos, "Querying Autonomous, Heterogeneous Information Sources", Stanford University Ph.D. thesis, September 2000.

PHD THESIS

B. International Peer-Rewiewed Publications (in chronological order)

3. V. Vassalos and S. Venkatasubramanian. "An Analysis of Factors Directing the Admission Process of AI Technologies"; *Proceedings of the 8th International Symposium on Artificial Intelligence*, Monterrey, Mexico, October 1995.

CONF PROCEED

H. Garcia-Molina, Y. Papakonstantinou, D. Quass, A. Rajaraman, Y. Sagiv, J. Ullman, V. Vassalos, and J. Widom, "The TSIMMIS approach to mediation: Data models and Languages"; *Journal of Intelligent Information Systems*, Special Issue on Next Generation Information Technologies and Systems, 8(2): March—April 1997.

JOURNAL ARTICLE

5. S. Abiteboul, R. Goldman, J. McHugh, V. Vassalos, and Y. Zhuge. "Views for Semistructured Data"; *Proceedings of SIGMOD Workshop for Semistructured Data*, held in conjunction with ACM SIGMOD '97, Tucson, Arizona, May 1997.

WORKSHOP PROCEED

 J. Hammer, M. Breunig, H. Garcia-Molina, S. Nestorov, V. Vassalos, R. Yerneni. "Template-Based Wrappers in the TSIMMIS System"; Demonstration Section of the *Proceedings of 26th ACM SIGMOD Conference*, Tucson, Arizona, May 1997. DEMO PAPER

 V. Vassalos and Y. Papakonstantinou. "Describing and Using Query Capabilities of Heterogeneous Sources"; *Proceedings of 23rd Very Large Databases Conference*, Athens, Greece, August 1997, pp. 256-65. CONF PROCEED 1:5.64

8. C. Li, R. Yerneni, V. Vassalos, H. Garcia-Molina, Y. Papakonstantinou, J. Ullman, and M. Valiveti. "Capability-Based Mediation in TSIMMIS"; *Proceedings of 27th ACM SIGMOD Conference*, Seattle, Washington, June 1998, pp. 564-566.

DEMO PAPER

9. V. Vassalos and Y. Papakonstantinou. "Using Knowledge of Redundancy for Query Optimization in Mediators"; *AAAI98* Workshop on AI and Data Integration, Wisconsin, July 1998.

WORKSHOP PROCEED

 S. Abiteboul, J. McHugh, M. Rys, V. Vassalos, and J. Wiener. "Incremental Maintenance of Semistructured Views over Semistructured Data"; *Proceedings of 24th VLDB Conference*, New York, New York, August 1998.

CONF PROCEED 1:6.43

11. Y. Papakonstantinou and V. Vassalos. "Query Rewriting using **CONF PROCEED** Semistructured Views"; *Proceedings of 28th ACM SIGMOD* 1:4.88 Conference, Philadelphia, Pennsylvania, June 1999. 12. V. Vassalos and Y. Papakonstantinou. "Expressive Capabilities JOURNAL ARTICLE Description Languages and Query Rewriting Algorithms"; Journal of Logic Programming, Volume 43, Issue 1, April 2000. Special Issue on Logic-Based Heterogeneous Information Systems. 13. M. Petropoulos, V. Vassalos, Y. Papakonstantinou. "XML Query CONF PROCEED Forms (XQForms): Declarative Specification of XML Query 1:5:0 Interfaces"; Proceedings of 10th WWW Conference (WWW10), Hong Kong, May 2001. 14. Y. Papakonstantinou, V. Vassalos. "The Enosys Data Integration CONF PROCEED Platform: Lessons from the Trenches", Proceedings of the Tenth International Conference on Information and Knowledge Management (CIKM 2001), Atlanta, Georgia, November 2001. 15. Y. Papakonstantinou, V. Vassalos: "Architecture and JOURNAL ARTICLE Implementation of an XQuery-based Information Integration Platform"; IEEE Data Engineering Bulletin, Volume 25, Issue 1, pp 18-26, March 2002. 16. Y. Papakonstantinou, M. Petropoulos, V. Vassalos, "QURSED: **CONF PROCEED** QUerying and Reporting for SEmistructured Data", Proceedings of 1:5.69 31th SIGMOD Conference, Madison, Wisconsin, June 2002. 17. M. Petropoulos, Y. Papakonstantinou, V. Vassalos. "Building XML JOURNAL ARTICLE Query Forms and Reports with XQForms(XQForms)"; Computer Networks, Volume 39, issue 5, August 2002. Special issue on XML. 18. Y. Papakonstantinou, V. Vassalos et al., "XML Queries and Algebra JOURNAL ARTICLE in the Enosys Integration Platform", Data and Knowledge Engineering, Volume 44, Issue 3, pp 299-322, March 2003 19. Y. Papakonstantinou, M. Petropoulos, V. Vassalos, "Graphical User JOURNAL ARTICLE Interfaces for Semistructured Data: The QURSED System"; ACM Transactions for Internet Technology (TOIT), Volume 5, Issue 2, pp 390-438, 2005. 20. K. Katsaros, Y. Niarhos, V. Vassalos, "DAIMON: Data Integration WORKSHOP PROCEED for a Mobile Network"; Proceedings of the Fourth International 1:2.75 ACM Workshop on Data Engineering for Wireless and Mobile Access (MobiDE '05), Baltimore, MD, June 2005 21. H. Georgiadis, V. Vassalos, "Improving the efficiency of XPath **CONF PROCEED** execution on relational systems"; Proceedings of the 10th 1:6.25 International Conference on Extending Database Technology (EDBT 2006), Munich, Germany, March 2006

CONF PROCEED

1:7.72

22. V. Lin, V. Vassalos, P. Malakasiotis, "MiniCount: Effficient

Rewriting of COUNT-Queries Using Views"; Proceedings of the

22nd International Conference on Data Engineering (ICDE '06), Atlanta, GA, April 2006

23. H. Georgiadis and V. Vassalos, "XPath on Steroids: Exploiting Relational Engines for XPath Performance," *Proceedings of 36th SIGMOD Conference*, Beijing, China, June 2007

CONF PROCEED 1:6.95

24. Y. Kotidis, V. Vassalos, A. Deligiannakis, V. Stoumpos, A. Delis, "Robust Management of Outliers in Sensor Networks Aggregate Queries," *Proceedings of the Sixth International ACM Workshop on Data Engineering for Wireless and Mobile Access (MobiDE '07)*, Beijing, China, June 2007

WORKSHOP PROCEED 1:3.1

25. D. Vassilakis and V. Vassalos, "Modeling Real P2P networks: The Effect of Altruism," *Proceedings of the Seventh IEEE International Conference on Peer to Peer Computing (P2P 2007)*, Galway, Ireland, August 2007

CONF PROCEED 1:5.27

26. A. Deligiannakis, V. Stoumpos, Y. Kotidis, V. Vassalos, A. Delis, "Outlier-Aware Data Aggregation in Sensor Networks", *Proceedings of the 24nd International Conference on Data Engineering (ICDE'08)*, Cancun, Mexico, April 2008

CONF PROCEED (POSTER) 1:6.2 (73 OUT OF 498)

27. N. Bosovic, V. Vassalos, "Two phase schema matching in real world relational databases", *ICDE Workshop on Information Integration Methods, Architectures, and Systems*, Cancun, Mexico, April 2008

WORKSHOP PROCEED 1:3

28. I. Varlamis, V. Vassalos, A. Palaios, "Monitoring the evolution of interests in the blogosphere", *ICDE Workshop Data Engineering for Blogs, Social Media, and Web 2.0*, Cancun, Mexico, April 2008

WORKSHOP PROCEED

29. A. Deligiannakis, Y. Kotidis, V. Vassalos, V. Stoumpos, A. Delis, "Another Outlier Bites the Dust: Computing Meaningful Aggregates in Sensor Networks", accepted for publication in *Proceedings of the 25nd International Conference on Data Engineering (ICDE'09)*, Shanghai, China, March 2009 (long paper)

CONF PROCEED 1:5.95

30. M. Bornea, V. Vassalos, Y. Kotidis, A. Deligiannakis, "Double Index Nested-loop Reactive Join for Result Rate Optimization", *Proceedings of the 25nd International Conference on Data Engineering (ICDE'09)*, Shanghai, China, March 2009 (long paper)

CONF PROCEED 1:5.95

31. V. Vassalos, "Answering queries using views", *Encyclopedia of Database Systems*, Springer Publishing, 2009 (in print)

BOOK CHAPTER

32. I. Manolescu, I. Papakonstantinou, V. Vassalos, "XML tuple algebra", *Encyclopedia of Database Systems*, Springer Publishing, 2009 (in print)

BOOK CHAPTER

33. D. Barbosa, P. Bohannon, J. Freire, C-C. Kanne, I. Manolescu, V. Vassalos, M. Yoshikawa, "XML storage", *Encyclopedia of Database Systems*, Springer Publishing, 2009 (in print)

BOOK CHAPTER

34. D. Vassilakis, V. Vassalos, "An analysis of peer-to-peer networks with altruistic peers," *Peer-to-Peer Networking and Applications*, Springer, Volume 2, issue 2, pp 109-127, 2009

JOURNAL ARTICLE

35. H. Georgiadis, M. Charalambides, V.Vassalos, "Cost Based plan selection for XPath", *Proceedings of 38th SIGMOD Conference*, Providence, RI, USA, June 2009.

CONF PROCEED ~1:8

36. B. Cautis, A. Deutsch, N. Onose, V. Vassalos, "Efficient Rewriting of XPath Queries Using Query Set Specifications", Proceedings of the VLDB endowment, Volume 2, issue 1: 301-312, Aug. 2009. The paper was also presented at the annual VLDB conf.2009 (acceptance ratio ~1/5,6)

JOURNAL ARTICLE

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