

Konstantinos Dimopoulos

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Education

- January 2016: (GPA 3.93) Ph.D. in Computer Science working with Prof. Torsten Suel, Computer Science and Engineering Department, NYU Tandon School of Engineering, Brooklyn, USA.
- July 2010: MSc in Computer Science and Technology, Computer Engineering and Informatics Department, University of Patras, Greece.
- September 2008: Diploma (5-year program), Computer Engineering and Informatics Department, University of Patras, Greece.

Research Interests

Information Retrieval, Query Processing, Geographic Web Search, Index Compression, Web Graph Compression, Machine Learning, Recommender Systems, Data and Web Mining, Distributed Algorithms.

Research Experience

- 2010 - 2016: Top-k Query Processing, Efficient Geographic Web Search, Text Search in Social Graphs, Web Graph Compression. Advisor: Torsten Suel, Professor, USA.
- 2009 - 2010 (Master Thesis): Worked on Result Clustering in Search Engines. Advisor: Christos Makris, Assistant Professor, Patras.
- 2009 - 2010: Worked on top-k event-matching in publish/subscribe systems. Advisor: Peter Triantafillou, Professor, Patras.
- 2009 - 2010: Worked on self-healing distributed data structures, namely on improved versions of the Forgiving-tree algorithm. Advisor: Ioannis Chatzigiannakis, Assistant Professor, Patras.
- 2009 - 2010: Member of the “Databases, Data Mining and Bioinformatics Research Group”, Computer Engineering and Informatics Department, University of Patras, Greece. Advisor: Athanasios Tsakalidis, Professor and Head of the Department.
- 2007 - 2010: Member of the “Graphics, Multimedia and Geographical Information Systems Lab”, Computer Engineering and Informatics Department, University of Patras, Greece. Advisor: Athanasios Tsakalidis, Professor and Head of the Department.
- September 2007 - August 2008 (Diploma Thesis): “Data Mining techniques and its applications to recommendation systems”. Advisor: Christos Makris, Assistant Professor, Patras.

Publications

- Document Routing and Index Reorganization Strategies in Distributed Search Engines.
Constantinos Dimopoulos, Ozgür Özkan, Abrar Sheikh, Torsten Suel.
(under submission).
- Fast First-Phase Candidate Generation for Cascading Rankers.
Qi Wang, Constantinos Dimopoulos, Torsten Suel.
39th ACM International Conference on Research and Development in Information Retrieval (SIGIR'16) (Acceptance rate 18%).
- A Candidate Filtering Mechanism for Fast Top-k Query Processing on Modern CPUs.
Constantinos Dimopoulos, Sergey Nepomnyachiy, Torsten Suel.
36th ACM International Conference on Research and Development in Information Retrieval (SIGIR'13) (Acceptance rate 19.9%).
- Optimizing Top-k Document Retrieval Strategies for Block-Max Indexes.
Constantinos Dimopoulos, Sergey Nepomnyachiy, Torsten Suel.
6th ACM Conference on Web Search and Data Mining (WSDM'13) (Acceptance rate 19%).
- Text vs. Space: Efficient Geo-Search Query Processing.
Maria Christoforaki, Jinru He, Constantinos Dimopoulos, Alexander Markowetz, Torsten Suel.
20th ACM Conference on Information and Knowledge Management (CIKM'11) (Acceptance rate 15%).
- A Web Page Usage Prediction Scheme using Sequence Indexing and Clustering Techniques.
Constantinos Dimopoulos, Christos Makris, Yannis Panagis, Evangelos Theodoridis, Athanasios Tsakalidis.
Data & Knowledge Engineering (DKE) 69(4): 371-382 (2010)

Honors/Awards

- September 2010: Andreas Mentzelopoulos Scholarship from University of Patras, Greece

Teaching Experience

- 2010 - 2015: Teaching assistanship for the Web Search Engines and Database course
Professor: Torsten Suel
- 2009 - 2010 (Spring Semester) : Teaching assistanship for the Data Mining course
Professor : Christos Makris and Vasileios Megalooikonomou
- 2009 - 2010 (Fall Semester) : Teaching assistanship for the Information Retrieval course
Professor : Christos Makris
- 2009 - 2010 (Fall Semester) : Teaching assistanship for the Introduction to Software course
Professor : Christos Makris
- 2008 - 2009 (Spring Semester) : Teaching assistantship for the course Distributed Systems II
Professor : Paul Spirakis and Ioannis Chatzigiannakis
- 2008 - 2009 (Fall Semester) : Teaching assistanship for the Introduction to Software course
Professor : Christos Makris

Skills and Technical Expertise

- Programming Languages: C, C++ (also experience with Perl, Python, PHP, Java, C#, Matlab, Prolog, Unix shell scripting, HTML)
- Operating Systems: Unix/Linux, Windows 98/NT/2000/XP/Vista/7 (also experience with Irix, Solaris)
- Database Systems: Sql, MySql, SQLite
- Search Architecture, Experience building Search Engine Systems, Recommender Systems, Data and Web Mining, Advanced Database Systems, experience with Machine Learning and Hadoop/MapReduce

Working Experience

- May 2014 - August 2014: Software Engineering Intern at Google (Search Team)
Advisor: Beckett Madden-Woods, Senior Staff Software Engineer, Google
- May 2013 - August 2013: Software Engineering Intern at Google (Search Team)
Advisor: Marcus Fontoura, Staff Research Scientist, Google
- November 2009 - present: Design, development, and maintenance of the website <http://www.papadopouloucollections.gr> for the Papadopoulou Collections company, which is a dealer of ALNO, one of the world's largest kitchen manufacturer.
- April 2009 - September 2010: Design, development, and maintenance of the Messolongi football club website <http://www.gomfc.gr>.
- August 2008 - August 2009: System and Network administrator of the Center of Technical Training (KETX) in the Greek military Army Camp during my military service.
- October 2007 - September 2010: System and Network Administrator of Eldrug S.A company.
- August 2007 - September 2010: Design, implementation, and maintenance of the website <http://www.eldrug.gr> for the Eldrug S.A company, which is a spin-off Biotechnology Company.
Supervisor : John Matsoukas, Professor of Chemistry Department, University of Patras, Greece.
- August 2006 - present: Design, implementation (in C#), and maintenance of the commercial program "Team Database", a program for managing mini soccer court (5x5) teams, which is being used by more than 20 clients in Greece.
- February 2006 - September 2010: System and Network Administrator of the lab of the Postgraduate program of Medicinal Chemistry of the Department of Chemistry at University of Patras and responsible for the normal use of the chemistry programs Accelrys and Quanta running on Irix and Redhat Workstation 4.0. Supervisor : Theodore Tselios, Lecturer of Chemistry Department, University of Patras, Greece.
- November 2005 - September 2010: Design, implementation, and maintenance of the website <http://www.medicinalchemistry.gr> for the Postgraduate program of Medicinal Chemistry of the Department of Chemistry at University of Patras. Supervisor : John Matsoukas, Professor of Chemistry Department, University of Patras, Greece.
- December 2004 - October 2005: Member of the Web Group of the Department of Computer Engineering & Informatics Department, which is responsible for the development and maintenance of the department's web presence, including the websites <http://my.ceid.upatras.gr> and <http://www.ceid.upatras.gr>, databases, servers and network. Professor : Aristidis Ilias

References

- Torsten Suel, Professor
Department of Computer Science & Engineering
NYU Tandon School of Engineering, Brooklyn, NY
Email: torsten.suel@nyu.edu
- Marcus Fontoura, Partner Architect at Microsoft
Azure, Microsoft Corporation
Email: marcusfo@microsoft.com
- Christos Makris, Assistant Professor
Department of Computer Engineering & Informatics
University of Patras, Greece
Email: makri@ceid.upatras.gr
- Athanasios K. Tsakalidis, Professor
Department of Computer Engineering & Informatics
University of Patras, Greece
Email: tsak@cti.gr