

Nikolaos Armenatzoglou

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EDUCATION	Hong Kong University of Science and Technology , Hong Kong Ph.D in Computer Science Thesis: Query Processing in Geo-Social Networks Sept 2010-Sept 2015
	University of Crete , Heraklion, Greece M.Sc. Computer Science Department Thesis: Information Retrieval - Faceted and Dynamic Taxonomies Sept 2007-March 2010
	University of Crete , Heraklion, Greece B.Sc. Computer Science Department Thesis: Creating a Web Crawler Sept 2002-Sept 2007
EMPLOYMENT	Pivotal Inc., USA Position: MTS 3 (Oct 2015 - June 2016), Senior MTS (July 2016 - Present) Member of Query Execution team working on Greenplum database (GPDB) execution engine. <ul style="list-style-type: none">· Code Generation in GPDB. Partial code generation of Scan and Aggregate operators. 2X performance improvement in TPCH-Q1.· Caching Catalog and Statistics in Orca (a modular query optimizer). 8% improvement in TPC-H and customer workloads.· Award in recognition of work diagnosing, fixing, and shipping multiple customer hot issues, as well as central role in advancing code generation. Oct 2015 - Present
	QUBIS, Qualified Business Information Systems Co-founder and CTO of QUBIS, a Greek software development company. March 2008 - April 2010
	Institute of Computer Science (ICS) - FORTH , Heraklion, Greece <i>Research assistant, Information Systems Laboratory</i> <ul style="list-style-type: none">· Development of Flexplorer (http://www.ics.forth.gr/tzitzik/flexplorer/), a general purpose API for supporting exploratory search. Flexplorer used by ESA (European Space Agency) to improve searching and browsing photos that depict astronomical objects.· Participation in Mitos project a Web Search Engine with emphasis on exploratory search. September 2007 - April 2010
	Ministry of National Education and Religious Affairs of Greece Object Oriented Programming Seminars. January 2008 - March 2008
	Technological Educational Institute of Crete <i>Computer Lab Teacher</i> January 2008 - March 2008
SELECTED PUBLICATIONS	<ol style="list-style-type: none">1. Armenatzoglou, N., Pham, H., Ntranos, V., Papadias, D., Shahabi, S. Real-Time Multi-Criteria Social Graph Partitioning: A Game Theoretic Approach. In SIGMOD, Melbourne, Australia, June, 2015.2. Armenatzoglou, N., Ahuja, R., Papadias, D. Geo-Social Ranking: Functions and Query Processing. The VLDB Journal (VLDBJ), 24(6): 783 – 799, December 2015.3. Armenatzoglou, N., Papadopoulos, S., Papadias, D. A General Framework for Geo-Social Query Processing. In VLDB, Riva Del Garda, Italy, August, 2013.4. Ahuja, R., Armenatzoglou, N., Papadias, D., Fakas, G. Geo-Social Keyword Search. In SSTD, Seoul, Korea, August 2015.5. Papadakos, P., Theoharis, Y., Marketakis, Y., Armenatzoglou, N., Tzitzikas, Y. Mitos: Design and Evaluation of a DBMS-based Web Search Engine. In PCI, Samos Island, Greece, August 2008.6. Papadakos, P., Armenatzoglou, N., Kopidaki, S., Tzitzikas, Y. On exploiting static and dynamically mined metadata for exploratory web searching. <i>Knowledge and Information Systems Journal (KAIS)</i>, 30(3):493–525, March 2012.

7. Feng, X., Armenatzoglou, N., Xu, H., Zhao, X., Hui, P. Finding Top-k Places for Group Social Activities. In **SDMA**, Suzhou, China, September 2016.
8. Tzitzikas, Y. and Armenatzoglou, N. and Papadakos, P. Flexplorer: A Framework for Providing Faceted and Dynamic Taxonomy-Based Information Exploration. In **FIND - DEXA**, Turin, Italy, September 2008.
9. Papadakos, P., Kopidaki, S., Armenatzoglou, N., Tzitzikas, Y. Exploratory web searching with dynamic taxonomies and results clustering. In **ECDL**, Corfu Island, Greece, September 2009.

SERVICE

Program Committee Member.

International Conference on Mobile Data Management (**MDM** 2013, 2014, 2015, 2016)
 Very Large Data Bases Journal (**VLDBJ**)
 International Conference on Spatial Databases (**SIGSPATIAL**) 2016

External Referee.

ACM Transactions on Database Systems (**TODS**), ACM International Conference on Management of Data (**SIGMOD**), Proceedings of the Very Large Data Bases Endowment (**PVLDB**), ACM International Conference on Information and Knowledge Management (**CIKM**), IEEE Transactions on Knowledge and Data Engineering (**TKDE**)

AWARDS, SCHOLAR- SHIPS

2016: Pivotal Inc. Performance Recognition Award.

2012-2015: SENG PhD Fellowship Award.

April 2012: HKUST 2012 entrepreneurship competition. Trade Show Winner: WaBit Inventor of a smart phone / tablet application enabling end users to interact with the show they are watching.

September 2010 - September 2015: Postgraduate scholarship from HKUST.

September 2007 - March 2010: Postgraduate scholarship from ICS-FORTH for M.Sc. studies.

ACADEMIC VISITS, INTERNSHIPS

June 2014 - August 2014 Pivotal Inc. Internship - Query Execution team, GPDB. Topic: Caching intermediate results. Outcome: **2 orders of magnitude** execution time improvement in specific customer queries.

May 2014 Massachusetts Institute of Technology (MIT), Computer Science and Artificial Intelligence Laboratory (CSAIL). Topic: TileDB (<http://istc-bigdata.org/tiledb/>) Hosted by Dr. Stavros Papadopoulos.

May 2013 - July 2013 University of Southern California (USC), Computer Science and Electrical Engineering. Hosted by Prof. Cyrus Shahabi.

TEACHING EXPERIENCE

Hong Kong University of Science and Technology (Teaching Assistant). Advanced Database Systems (Spring 2013), Design and Analysis of Algorithms (Spring 2011).

University of Crete (Teaching Assistant). Object Oriented Programming (Winter 2007, Winter 2008), Data Structures (Winter 2007), Information Retrieval Systems (Spring 2008, Spring 2009).

Technological Educational Institute of Crete (Computer Lab Teacher). Programming in C (Winter 2008), Introduction to Information Engineering (Winter 2008), Programming in Visual Basic (Spring 2009), Programming in Fortran (Winter 2009), ERPs (Winter 2009).

1st Professional Training Institute of Crete (Instructor). Internet Technologies (Winter 2007), Use of Computers (Spring, Winter 2008).

Ministry of National Education and Religious Affairs of Greece (Seminar Instructor). Object Oriented Programming (March 2008 - September 2008).

SKILLS

Programming languages: C, C++, Java, Python, LLVM.

Operating systems: Linux, Unix, OSX, Windows.

Languages: Fluency in English and Greek (mother tongue).