

# Shenoda Guirguis

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## Research Interests

Data Management: Big Data, Cloud Data Management, Data Streams, Web Databases and Data Mining.

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## Education

<b>Ph.D.</b> in Computer Science	<b>University of Pittsburgh</b>	2011
Dissertation Title: "Scalable Processing of Aggregate Continuous Queries", GPA: 3.792		
<b>M.Sc.</b> in Computer Science	<b>University of Pittsburgh</b>	2010
Project Title: "Adaptive Scheduling of Web Database Transactions"		
<b>M.Sc.</b> in Computer Science	<b>Alexandria University</b>	2006
Thesis Title: "Predicting Itemsets' Support of Association Rules Mining", GPA: 3.75		
<b>B.Eng.</b> in Computers Sc. & Eng.	<b>Alexandria University</b>	2001
Degree: Outstanding, Graduated with degree of honor, Ranked 6th. GPA 3.78		

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## Awards & Honors

Best Research Award on 10<sup>th</sup> Annual CS Day, March 2010.  
Andrew Mellon Predoctoral Fellowship (2010-2011). Awarded annually to doctoral students of exceptional ability and promise.  
NSF travel fellowship to attend ICDE 2010, Jan 2010.  
Runner-up Poster on 9<sup>th</sup> Annual CS Day, March 2009.  
Best Poster Award on 8<sup>th</sup> Annual CS Day, February 2008.  
A&S Fellowship award, University of Pittsburgh, Spring 2006.  
Degree of Honor - Computers & Automatic Control Dept., Alexandria University, July 2001.

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## Patents

Shenoda Guirguis, Alok Pareek, Steve Wilkes. System and Method for real-time transactional data obfuscation. Application No. US 61/369,000, filed 7/ 29/2010. (pending)  
Hyun Jin Moon, Shenoda Guirguis, Yun Chi, Junichi Tatemura, V. Hakan Hacigumus. Multi-Tenant Database Management for SLA Profit Maximization. Application No. US 12/985,057, filed 1/5/2011 (pending)

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## Research Experience

**Research Internships** at NEC Research Lab (summer 2010) & GoldenGate/ Oracle (summer 09 & 08).  
**Member of the ADMT Lab** CS Dept., University of Pittsburgh  
Since Summer 2006 – Current  
Involved in the AQSIOS project (<http://db.cs.pitt.edu/group/projects/aqsios>)  
Participated in implementing the group's streams' scheduling schemes, in AQSIOS 1.0  
Implemented my multiple Aggregate Continuous Queries optimizer in AQSIOS 3.0

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## Publications

### Journals

1. Shi-Kuo Chang, Lei Zhao, **Shenoda Guirguis** and Rohit Kulkarni, "A Computation-Oriented Multimedia Data Streams Model for Content-Based Information Retrieval", *Multimedia Tools and Applications Journal*, Springer US, Sep. 2009.

### Conferences and Workshops

2. **Shenoda Guirguis**, Panos K. Chrysanthis, Alexandros Labrinidis and Moahmed Saraf, "Three-level Processing of Multiple Aggregate Continuous Queries", Proc. of the 28th IEEE International Conference on Data Engineering (**ICDE 2012**), Washington DC, April 2012.
3. **Shenoda Guirguis**, Mohamed Sharaf, Panos K. Chrysanthis and Alexandros Labrinidis, "Optimized Processing of Multiple Aggregate Continuous Queries", Proceedings of 20<sup>th</sup> ACM Conference on Information and Knowledge Management (**CIKM 2011**), Glasgow, UK, October 24-28, 2011. **Nominated for Best Paper award.**
4. **Shenoda Guirguis** and Alok Pareek, "BronzeGate: Real-time Transactional Data Obfuscation for GoldenGate", Proceedings of the 13<sup>th</sup> International Conference on Extending Database Technology (**EDBT 2010**) – Industrial Track, Lausanne, Switzerland, March 22-26, 2010
5. Lory Al Moakar, Panos K. Chrysanthis, Christine Chung, **Shenoda Guirguis**<sup>\*</sup>, Alexandros Labrinidis, Panayiotis Neophytou and Kirk Pruhs, "Admission Control Mechanisms for Continuous Queries in the Cloud", Proceedings of 26th IEEE Int'l Conference on Data Engineering (**ICDE 2010**), Los Anglos, CA, USA, Mar 1-6, 2010. **\*Authors are listed in Alphabetical Order.**
6. **Shenoda Guirguis**, Mohamed Sharaf, Panos Chrysanthis, Alexandros Labrinidis, and Kirk Pruhs, "Adaptive Scheduling of Web Transactions", Proceedings of 25th IEEE Int'l Conference on Data Engineering (**ICDE 2009**), Shanghai, China, Mar 29-April 4 2009.
7. **Shenoda Guirguis**, Panayiotis Neophytou, Panos K. Chrysanthis, Alexandros Labrinidis and Kirk Pruhs, "Expanding Continuous Queries Scope for Better Event Detection", SSPC Wrokshop, St. Louis, Missouri, March 2009.
8. **Shenoda Guirguis**, Rohit Kulkarni and S. K. Chang, "A Multimedia Data Streams Model for Content-Based Information Retrieval", Proceedings of 08 International Conference on Distributed Multimedia Systems (**DMS 08**), Boston, USA, Sept. 4-6, 2008.
9. Mohamed Sharaf, **Shenoda Guirguis**, Alexandros Labrinidis, Kirk Pruhs, and Panos Chrysanthis, Poster Session: "ASETS: A Self-Managing Transaction Scheduler", Self Managing Databases Workshop (**SMDB 08**), 2008.
10. **Shenoda Guirguis**, Khalil M. Ahmed, Nagwa M. El-Makky, and Alaaeldin M. Hafez. "Mining the future: Predicting itemsets' support of association rules mining". In Foundations of Data Mining Workshop (**FDM 06**), **2006**, 2006.

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## Industry Experience and Internships

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|--|-----------------------|-------------------|
| October 2011-Current   | Intel                 | Portland, OR      |
| <b>Software Performance Engineer</b>   |                       |                   |
| <ul style="list-style-type: none"><li>▪ Analysis and Optimization of Oracle Database products on Intel platforms</li><li>▪ Identifying opportunities to impact Oracle's software products with Intel's roadmap products, tools, and technologies and impacting Intel's roadmap products and technologies via utilizing knowledge of Oracle software architecture and characteristics</li></ul> |                       |                   |
| Summer 2010  | NEC Labs America      | Cupertino, CA     |
| <b>Summer Research Assistant</b>   |                       |                   |
| 11. Cloud Data Management: Multi-Tenant Databases.   |                       |                   |
| Summer 2009  | GoldenGate Co./Oracle | San Francisco, CA |
| <b>Research Intern</b>   |                       |                   |
| 12. Scalable Merger Project. Investigated the problem, and designed the solution.  |                       |                   |

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**Industry  
Experience  
and  
Internships  
(contd.)**

- Summer 2008 GoldenGate Co./Oracle San Francisco, CA  
**Research Intern**  
13. Transactional Data Obfuscation. Investigated the problem, designed & implemented the solution in C.
- Jul 2001- Nov 2005 Bibliotheca Alexandrian Alexandria, Egypt  
**Senior Software Engineer**  
14. Oracle DBA, member of the DB Administration Unit.  
15. Designed and Implemented many deployed and in operation applications - using C++, .NET, and SQL Server - such as the *Membership System*; [www.nasser.org](http://www.nasser.org), [oacis.bibalex.org](http://oacis.bibalex.org), etc.
- Summer 2005 Yale University New Haven, CT  
**Software Engineer Exchange Visitor**  
Worked in OACIS project (<http://www.library.yale.edu/oacis/>), using PHP and MySQL.
- Summer 2000 Self-employed Alexandria, Egypt  
16. Analyzed, designed and developed **PC Company Manager I**, an inventory database application for Hardware Sales Company.
- Summer 1999 Self-employed Alexandria, Egypt  
17. Analyzed, designed and developed **Doctor Manager I & II**, a health care system (in Egypt's yet non-automated medical system).
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**Teaching  
Experience**

- Teaching Assistant** CS Dept., University of Pittsburgh  
18. CS 2550: Advanced DBMS, Spring 2010
  - o Graduate level
  - o Preparing assignments and grading
19. CS 1555: DBMS, Spring 2008 and Fall 2009
  - o Undergraduate level
  - o Recitations, preparing assignments and grading
20. CS 1501: Algorithms Implementation, Spring 2007
  - o Undergraduate level
  - o Recitations
- Instructor** Computer Services Center, St. Mina Church, Alexandria, Egypt  
21. Visual Basic and Advanced Visual Basic courses, Summer 2002  
22. Created syllabus, prepared course material and conducted labs.
- Teaching Assistant** Faculty of Engineering, Alexandria University  
23. Introduction's to Computers lab, Fall 2001
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**Languages**

24. English: Excellent communication skills.  
25. Greek & French: good/fair reading, weak writing, fair speaking.  
26. Egyptian: Native.
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**Interests**

27. Soccer: Founder & X-President (for 3 years) of CS-Soccer Student Club (founded the first soccer team for CS Dept and organized Grassroot event).  
28. Handwork: carpentry & electric works.  
29. Reading & classical music.