

# Ghazi Al-Naymat

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## SUMMARY

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I finished my PhD thesis in the School of Information Technologies at The University of Sydney. The title of my thesis is "New Methods for Mining Sequential and Time Series Data". I am an experienced ambitious person in many computer aspects. I would like to work in an environment which is full of challenges that I can put my expertise together to work individually or with a team to achieve the ultimate goals. I have excellent research and academic skills. I also have more than 8 years in programming and application development experience.

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## COMPUTER SKILLS

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### Programming Languages

- Proficient in: Java, Matlab and Microsoft Visual C++®
- Familiar with: Microsoft Visual Basic®, Python and C

### Software

- Databases: Oracle, Microsoft SQL Server, MySQL and Microsoft Access
  - Platforms: Microsoft Windows 2000, Microsoft Windows XP, Linux and Unix
  - Data mining tools: Minitab® 15 Statistical Software, Statistical Analysis with SAS/STAT® Software (version 9.1.3) and Weka (Waikato Environment for Knowledge Analysis)
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## EXPERIENCE

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### Teaching Assistant and Tutor

2005-Present

*The University of Sydney – School of Information Technologies*

Primary responsibilities:

- Teaching and tutoring undergraduate and postgraduate students
- Tutoring the following courses: Database Systems 1 and 2, Relational Database Management Systems, Advanced Data Models, and Data Mining

### DBA and System Analyst

2008-2009

*The University of Sydney – Arts Faculty*

Primary responsibilities:

- Analyzing the existing systems
- Designing new flexible database scheme for future uses

### Research Assistant

2005-2006

*The University of Sydney – School of Information Technologies*

Primary responsibilities:

- Conducted research in astronomy domain to develop new mining techniques to extract knowledge from spatial datasets

*National ICT Australia – NICTA Sydney*

Primary responsibilities:

- Participated as a member of DMiST (Data Mining in Spatio-Temporal application) project
- Designed data mining techniques to extract knowledge from large Spatio-Temporal datasets

**DBA and Systems Analyst** 2000-2004

*Mu'tah University – Computer Centre*

Primary responsibilities:

- Designed databases from scratch for many systems
- Developed many applications for various departments at Mu'tah University
- Supported the existing system which was developed using Oracle database
- Provided object-oriented design, programming and implementation support to the most of the designed systems using oracle 8i and Developer 2000
- Prepared test plans and data, and user documentation for the customer billing system
- Developed Oracle backup and recovery strategy and scripts
- Managed and resolved design issues during development
- Generated reports from the database using PL/SQL and SQL
- Managed database security, created and assigned appropriate roles and privileges to users depending on their activity
- Responsible for creating table spaces, tables, indexes, users
- Performed end-user demonstrations and training
- Performed testing and training roles for the International Computer Driving Licence (ICDL).

**DBA and Computer Programmer** 1999-2000

*Jordanian Customs Department*

Primary responsibilities:

- Designed databases from scratch for new systems
- Systems support
- Conducted client demonstrations and training
- Designed reports from the database using PL/SQL and SQL

**System Support and Computer Programmer** 1998-1998

*MID Contracting Company*

Primary responsibilities:

- Supported the accounting systems
- Designed new reports based on the management requirements

**Computer Teacher** 1998-1999

*Model School – Mu'tah University*

Primary responsibilities:

- Taught computer science courses to high school students
- Maintained all computer systems (software and hardware) at the school

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EDUCATION

**The University of Sydney** 2005-2009

*School of Information Technologies*

- PhD, Information Technology (Data Mining)

**The University of Sydney** 2004-2005

*School of Information Technologies*

- MSc, Information Technology (Database Management System)

**Mu'tah University** 1994-1998

*Computer science department*

- BSc, Computer Science (Computer Programming)
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#### TRAINING COURSES

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- Microsoft Certified System Engineer (**MCSE**) at CCS and STS Companies, Jordan
  - Microsoft ASP.NET, Executrain, Jordan
  - Oracle Forms (II), Software development
  - Oracle Reports (I), Software development
  - Oracle Reports (II), Software development
  - DBA for Oracle 8i database
  - Backup and recovery for Oracle 8i database
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#### AWARDS

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- The Capital Markets Cooperative Research Centre full scholarship (2006- present)
  - EII award to attend winter school in Data Mining (2006 - Melbourne, 2008 - Canberra)
  - Travel award from ACM-SIGAPP (2007)
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#### ONGOING PROJECTS

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- Mining for pairs trading patterns in large stock time series (Stock Market) datasets. This project is supported by the Capital Markets Cooperative Research Centre (CMCRC), Australia
  - Data mining in large Spatio-Temporal datasets (DMiST), NICTA- Australia
  - Scientific Data Mining and Knowledge Discovery, this is a joint project with Dr. Mohamed Medhat Gaber, Monash University, Australia
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#### COMPLETED PROJECTS

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- Completed a project in mining large spatial databases using Oracle 10g
  - Analyzed and designed a database application for General Box (Finance Department) using Oracle 9i and Developer 6i. This system is a multi-user system
  - Analyzed and designed a database application for Central Tenders Using Oracle 9i, Microsoft SQL, and Developer 6i.
  - Analyzed and designed a database application for Supplies Department using Oracle 9i, Developer 6i. The project was developed to control the internal and external store transactions and university's human resources. In addition, it manages easily the follow up process for the purchasing methods because the developed system is connected with the university budget system.
  - Analyzed and designed databases and applications for the Health Centre using Oracle 9i, Developer 6i, and Microsoft SQL.
  - Designed a security login system for all the above projects using Visual basic 6 and Microsoft SQL.
  - Designed privileges security system for all the above systems. This system controls the users' transactions and grants access to the system by using one login name and password.
  - Designed a conversion system from the previous COBOL database to the Oracle 9i database.
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#### PROFESSIONAL MEMBERSHIPS

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- Member of Association Computing Machinery (ACM SIGAPP).
  - Member of IEEE computer society.
  - Member of the ARC Network in Enterprise Information Infrastructure (EII), Australia.
  - Member of Knowledge Management Research Group (KMRG), SIT-The University of Sydney.
  - Member of the Database Reading Group (DBRG), SIT-The University of Sydney.
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## RESEARCH INTERESTS

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My research interests include knowledge management, database management system, and data mining. I have been working in developing novel data mining techniques which can be used in different applications, such as spatial, spatio-temporal, and time series applications. The title of my PhD thesis is "New Methods for Mining Sequential and Time Series Data".

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## PUBLICATIONS

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### Journal Articles

1. **Ghazi Al-Naymat**, Sanjay Chawla, and Javid Taheri. *SparseDTW: A Novel Approach to Speed up Dynamic Time Warping*. In communication with the journal of the Data & Knowledge Engineering (DKE), 2009.
2. **Ghazi Al-Naymat**, Sanjay Chawla and Joachim Gudmundsson. *Random Projection for Mining Long Duration Flock Pattern in Spatio-Temporal Datasets*. Journal of the **GeoInformatica**. Oct 5th, 2008.

### Conference Papers

3. **Ghazi Al-Naymat**. *Enumeration of Maximal Clique for Mining Spatial Co-location Patterns*. Proceedings of the 6th ACS/IEEE International Conference on Computer Systems and Applications (**AICCSA**), Doha, Qatar. Mar 31st- Apr 4th, 2008. Pages (126-133).
4. **Ghazi Al-Naymat** and Javid Taheri. *Effects of Dimensionality Reduction Techniques on Time Series Similarity Measurements*. Proceedings of the 6th ACS/IEEE International Conference on Computer Systems and Applications (**AICCSA**), Doha, Qatar. Mar 31st- Apr 4th, 2008. Pages (188-196).
5. **Ghazi Al-Naymat**, Sanjay Chawla and Joachim Gudmundsson. *Dimensionality Reduction for Long Duration and Complex Spatio-Temporal Queries*. The 2007 ACM Symposium on Applied Computing (**SAC**). Seoul, Korea. March 11-15, 2007. Pages (393-397).
6. Florian Verhein and **Ghazi Al-Naymat**. *Fast Mining of Complex Spatial Co-location Patterns using GLIMIT*. The 2007 IEEE International Conference on Data Mining (**ICDM**). Omaha NE, USA. October 28-31, 2007. Pages (679-684).

### Technical Reports

7. **Ghazi Al-Naymat**, Sanjay Chawla and Joachim Gudmundsson. *Dimensionality Reduction for Long Duration and Complex Spatio-Temporal Queries*. TR 600. ISBN 1 86487 874 6. School of Information Technologies, The University of Sydney - Australia. October, 2006.
  8. **Ghazi Al-Naymat** and Sanjay Chawla. *Data preparation for Mining Complex Patterns in Large Spatial Databases*. TR 576. ISBN 1 86487 786 3. School of Information Technologies, The University of Sydney - Australia. November, 2005.
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## REFEREES

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