

Oguzhan Topsakal

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Education

2003 – 2007 PhD in Computer Science Department at the *University of Florida, USA*

Subject: Schema Matching by Analyzing ReportTs (SMART) Approach.

2004 – 2005 Study Abroad Student in the Center for Computing Technologies labs at the *University of Bremen, Germany*

2001 – 2003 Master of Science in Computer Engineering at the University of Florida, USA

Thesis: Extracting Semantics from Legacy Sources Using Reverse Engineering of Java Code with Help of Visitor Patterns.

1992 – 1996 Bachelor of Engineering in Computer Engineering at the *Istanbul Technical University, Turkey*

Employment History

2003 ... **Research Assistant** for SEEK and THALIA projects at the University of Florida

...2007 Scalable Extraction of Enterprise Knowledge (SEEK) project aims fundamental advances in the semi-automatic extraction of information resident in heterogeneous legacy sources.

Test Harness for the Assessment of Legacy Information Integration Approaches (THALIA) project provides a test bed and benchmark for testing and evaluating data integration technologies.

2001... **Teaching Assistant** in the Computer Science Department at the University of Florida

...2006 Information and Database Systems Course

Introduction to Computer Science Course

Data Structures & Algorithms Course

Discrete Mathematics Course

2006 **Tutor** for VB .NET and C#

2002 – 2007 **Teaching Assistant** for Data Warehousing & Data Mining Course at the University of Hong Kong

2000... **Software Specialist** in the Information Technologies Department of Finansbank, Istanbul

...2001 A team member in the Core-Banking project. The project implemented whole functionality of a bank in a multi-tier, object-oriented architecture with J2EE on Oracle and involved over 100 IT and business specialists.

Keywords: ORACLE, Java, Visual Age, Oracle Designer and Rational Rose CASE tools, J2EE, EJB

1999... **Software Engineer** in Intek Software Company, Istanbul

...1999 Design & Development of a bakery automation program, which is being sold country-wide. The program has a generic structure, and gives opportunity of having an unlimited number of entry screens, reports, and query windows.

Keywords: Visual Basic, Access DB, Generic Structure, Report Generator Tool

1998... **Programmer** in the Requirement Supply Department of National Defense Ministry, Istanbul

...1999 Design & Development of a Contract-Observer program. It was developed with Visual Basic on Access database. It has over 50 open forms and a generic report form. Moreover, training of windows was given to staff.

Keywords: Visual Basic, Access DB, Novell, Windows training

1996... **Software Specialist** in the Information Technologies Department of Istanbul Stock Exchange Settlement and Custody Bank, Takasbank, Istanbul

...1997 Design & Development of Stock Observe program which queries millions of stock records. Tuning of report queries on SYBASE database was achieved causing to increase the temporal performance of each report by 100% to 200%.

Keywords: SYBASE, Querying huge number of records, tuning queries

Publications

- 2007** **Oguzhan Topsakal**, "Semantic Integration Through Application Analysis," PhD Dissertation, University of Florida
- William J. O'Brien, Joachim Hammer, Mohsin Siddiqui, **Oguzhan Topsakal** "Challenges, Approaches and Architecture for Distributed Process Integration in Heterogeneous Environments" Elsevier Editorial System for Advanced Engineering Informatics.
- 2007** **Oguzhan Topsakal** and Joachim Hammer, "Improving Database Schema Matching using Application Source Code" Proceedings of the IRI 2006 IEEE International Conference on Information Reuse and Integration.
- 2006** **Oguzhan Topsakal** and Joachim Hammer, "Schema Matching With Report Analysis." Proceedings of VLDB Workshop on Ontologies-based techniques for DataBases and Information Systems, Trondheim, Norway, September 2005.
- 2005** Joachim Hammer, Mike Stonebraker, and **Oguzhan Topsakal**, "THALIA: Test Harness for the Assessment of Legacy Information Integration Approaches." Proceedings of 21st International Conference on Data Engineering (ICDE 05), Tokyo.
- 2005** Joachim Hammer, Mike Stonebraker, and **Oguzhan Topsakal**, "THALIA: Test Harness for the Assessment of Legacy Information Integration Approaches." Technical Report, University of Florida, 11 pages, June 2004.
- 2004** **Oguzhan Topsakal**, "Extracting Semantics from Legacy Sources Using Reverse Engineering of Java Code with the Help of Visitor Patterns." M.S. Thesis, Department of Computer and Information Science and Engineering, University of Florida.
- 2003** Mark S. Schmalz, Joachim Hammer, MingXi Wu, **Oguzhan Topsakal**, "EITH - A Unifying Representation for Database Schema and Application Code in Enterprise Knowledge Extraction." ER 2003: 461-475
- 2003** Saangeetha Shekar, Joachim Hammer, Mark Schmalz, **Oguzhan Topsakal**, "Knowledge Extraction in the SEEK Project Part II: Extracting Meaning from Legacy Code through Pattern Matching." Technical Report TR03-003, Department of Computer and Information Science and Engineering, University of Florida, 35 pages.

Selected Significant Courses

Analysis of Algorithms	Semantic Data Integration	XML Seminars	Programming Language Principles
Software Engineering	Artificial Intelligence	Mobile Computing	Data Warehousing and Data Mining

Selected Significant Projects & Related Keywords

SMART Schema Matching Approach	Data Integration, Java, XML, OWL, Ontology, WordNET, Similarity of Texts
Development of THALIA Web Site	HTML, Java, XML, XQuery, Servlets, Java Scripts
Extracting Information from Java Code	Java, Visitor Patterns, Reverse Engineering
Modia: Managing Media Devices by a Cell Phone	J2ME, Java, Sockets
Compiler Implementation	Java, Visitor Patterns, '.class' file generation
Trying to Win Against an Unknown Opponent	Heuristics, Machine Learning, Java
Quick Puzzle Solver	Heuristics, Java, Lisp
Core Banking Project	Multi-tier Architecture, Object Oriented, Java, J2EE, EJBs
XMLtoDB [Opensource]	Parsing XML with SAX, Open source in sourceforge.net
DataExtractor (HTMLtoXML) [Opensource]	Extract from HTML and write into XML, Opensource in sourceforge.net

Computer Skills

Languages	Java, C#, C, C++, Visual Basic, Pascal, Fortran, Clipper, Lisp, JavaScript, Perl
Databases	Oracle, MySQL, Postgres, Sybase, MS Access, MS SQL Server
OS	Unix, Linux, Windows, Novell, Dos
Tools	Net Beans, Eclipse, Protégé, MS Visual Studio, Rational Rose, Visual Age, Oracle Designer, Source Safe.
Other	XML, XML Schema, XQuery, DTD, Html, UML, Servlets, Object Oriented Programming (OOP), EJBs

References are available upon request