Zeynep Odcikin OZDEMIR

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OBJECTIVE To obtain a challenging position as a software engineer in industrial research/development which utilizes and improves my technical, research and organizatonal skills.

EDUCATION

SYRACUSE UNIVERSITY — Syracuse, NY
PhD candidate in Computer Science, January 1999–Present, (GPA = 3.8/4.0)

SYRACUSE UNIVERSITY — Syracuse, NY
M.Sc. in Computer Engineering, December 1998, (GPA = 3.87/4.0)

HACETTEPE UNIVERSITY — Ankara, Turkey
M.Sc. in Computer Science, January 1995, (GPA = 3.67/4.0)
Thesis: Design and Implementation of Image Processing System for Ultrasound Fetal Head Images.

HACETTEPE UNIVERSITY — Ankara, Turkey
B.S. in Computer Science, July 1991, (GPA = 3.25/4.0)
Class Rank : 9/54

RESEARCH AND WORK EXPERIENCE

NORTHEAST PARALLEL ARCHITECTURES CENTER(NPAC)
AT SYRACUSE UNIVERSITY — Syracuse, NY
March 1996–November 1999
Graduate Research Assistant

COMPUTER SCIENCE AND ENGINEERING DEPARTMENT
AT HACETTEPE UNIVERSITY — Ankara, Turkey
November 1991–December 1994
Research and Teaching Assistant, was responsible for Database Laboratory, Microprocessing Laboratory, Digital Systems Laboratory and Software Courses for third- and fourth-year computer science and engineering students.

OBSTETRY CLINIC IN MEDICAL SCHOOL
AT HACETTEPE UNIVERSITY — Ankara, Turkey
September 1990–December 1994
Junior Software Developer(volunteer), participated in developing and testing medical imaging and expert systems for monitoring high risk pregnancies. This program collaborative study between Hacettepe University and EEE Department of Middle East Technical University, is funded by The European Economic Community(The EC).

PETKIM (PETROLEUM AND CHEMISTRY CORPORATION) — Izmit, Turkey
June 1990–September 1990
Summer Internship

I-BIMSA (IBM-SAPANCI Concultancy Center) Izmit, Turkey
June 1989–September 1989
Summer Internship

COMPUTER EXPERIENCE

Operating Systems : UNIX on Sun, SPARC, and SGI, Windows/NT, DOS, AOS/VS

Platforms : SUN Workstations, SGI Workstations, Origin2000, Data General MV/10000, Avion, IBM 4381 and Personal Computers

Programming Languages : C, C++, Java, and knowledge of Pascal, took classes in FORTRAN 77, Smalltalk/V, COBOL, INTEL 8086/8088, INTEL 8080A/8085, BASIC and PL/I

Web Technologies : VRML1.0&2.0, CGI Scripting, Servlets, JavaScript, Liveconnect, HTML and XML

Graphics and Windows : X-Windows, OpenGL, Inventor, MFC, and Motif

Databases : SQL, Oracle, Progress, Illustra

Network Protocols : TCP/IP, UDP

Other Softwares : Microsoft Word, PowerPoint, Excel, FrontPage, Visio, Latex, MatLab, Gnuplot, RationalRose Visual Modeling Tool, AVS, VHDL

Familar with Java RMI, CORBA (omniORB and JavaIDL) and COM

RECENT PROJECTS

Java Web Object Request Broker(JWORB) January 1999 – November 1999
JWORB is an extensible multi-protocol server written in Java. JWORB supports IIOP (for CORBA) and HTTP protocols. HTTP implementation supports: CGI 1.1, Sun Servlet API, DOM 1.0 first part, XML and XSL processors (obtained from free available codes). CORBA implementation supports: IIOP 1.0 Naming Service Event Service

- Participated in implementing and testing of Event and Naming services

Object Web Runtime Infrastructure(OWRTI) January 1999 – November 1999
High Level Architecture (HLA) Runtime Infrastructure (RTI) is a new distributed interactive simulation standard promoted by Defense Modeling and Simulation Office (DMSO). High Level Architecture (HLA) replaces the current DIS (Distributed Interactive Simulation) standard (IEEE 1278.1). HLA RTI is also proposed to OMG as a CORBA Distributed Simulation Facility. OWRTI is implemented in Java based on CORBA distributed object technology.

- DirectX and OpenGL base multi user game development using interfaces provided by OWRTI for testing
- Participated in implementing DIS-HLA bridges in Java and C++
- Participated in providing HLA compliance for military oriented DIS applications like vehicle and countermine simulator(CMS) to new DMSO HLA standard.

- Apllication development for DMSO RTI and OWRTI and testing

Forces Modeling and Simulation(FMS) January 1998 – November 1999
The Department of Defense(DoD) Programming Environment and Training (PET) as a part of High Performance Computing Modernization Program (HPCMP) (http://iwt.npac.syr.edu/demos/index.htm)

- Participated in developing electronic FMS training space
- Participated in metacomputing FMS demo at SuperComputing98 in Orlando
- Core PET FMS Support, tracking, monitoring and evaluation of new Web/Commodity software and commodity hardware technologies of relevance for the FMS
- DIS(IEEE 1278.1) PDU parser written in C++, supports multicasting and broadcasting on SGI and PC
- Parallel Modeling and Simulation Modules, developing parallel version of the the Comprehensive Mine Simulator (CMS - Night Vision Lab, Ft. Belvoir) code for Origin2000 family of distributed shared memory machines.

Tango Project January 1997 – December 1997
was funded by The Department of Defense. Tango is a Java-based collaboratory system for the World Wide Web. (http://www.npac.syr.edu/projects/tango)

- Java-COM integration on TangoLite which is a demonstration version of the TANGO written in java
- Ported PointPlus powerpoint slide viewer into Tango system and integrated with Microsoft Agent for visual and voice assistance
- Implemented 3D visible human viewer using VRML and java technologies
- Ported 2D visible human java applet developed at NPAC into the Tango system.

3D Visible Human Project March 1996 – December 1996
was part of the Collaboration and Interactive Visualization project, sponsored by DARPA via Rome Laboratory. Implementing educational tools for National Library of Medicine Visible Human data. (http://www.npac.syr.edu/projects/3Dvisiblehuman)

- Implemented stereo graphics viewer for 3D visible human data in C language using OpenGL. This viewer works on SGI systems and supports split-screen, quadbuffer and multi-channel stereo modes.
- Developed semi-automated segmentation toolkit in C under AVS system.

CONFERENCE PUBLICATIONS

"WebHLA as Integration Platform for FMS and other Metacomputing Application Domains", *the DoD HPC Users Group Conference*, Monterey, CA, June 8-15, 1999 [with G. Fox, W. Furmanski, G. Krishnamurthy, H. Ozdemir, K. Rangarajan and A. Sood]

"Using WebHLA to Integrate HPC FMS Modules with WebCommodity based Distributed Object Technologies of CORBA, Java, COM and XML", *the Advanced Simulation Technologies Conference (ASTC99)*, San Diego, CA, Apr 11-15, 1999. [with Geoffrey C. Fox, Wojtek Furmanski, Ganesh Krishnamurthy, Hasan T. Ozdemir, Tom A. Pulikal, Krishnan Rangarajan and Ankur Sood]

"WebHLA - An Interactive Multiplayer Environment for High Performance Distributed Modeling and Simulation", *International Conference on Web-based Modeling and Simulation (WebSim99)* , San Francisco, CA, January 17-20, 1999, [with G. C. Fox, W. Furmanski, S. Nair, H. T. Ozdemir, and T. A. Pulikal]

"WebHLA - An Interactive Programming and Training Environment for High Performance Distributed FMS", *Simulation Interoperability Workshop (SIW Fall 98)* [with G.C.Fox, W. Furmanski, S. Nair, H.T. Ozdemir and T. Pulikal]

"Microsoft DirectPlay meets DMSO RTI for Virtual Prototyping in HPC T&E", *in Proceedings of the ITEA'98 Workshop on High Performance Computing in Support of Test and Evaluation*, Aberdeen, MD, July 13-16, 1998, [with G. C. Fox, W. Furmanski, and S. Nair]

"WebHLA - An Interactive Programming and Training Environment for High Performance Modeling and Simulation", *DoD HPC 98 Users Group Conference* [with D. Bernholdt, G. C. Fox, W. Furmanski, B. Natarajan, H.T. Ozdemir and T. Pulikal]

"Exploring JSDA, CORBA and HLA based MuTech's for Scalable Televirtual (TVR) Environments", *the Workshop on OO and VRML* in the VRML98 Conference, Monterey, California on Feb 16-19,1998. [with D. Dias, G. Fox, W. Furmanski, V. Mehra, B. Natarajan, S. Pallickara, H.T. Ozdemir]

"A Digital Image Processing Subsystem For Semi Automated Karyotyping," *International Symp. on Computer and Information Science,* Antalya, Turkey, (November 7-9, 1994). [with H.T. Ozdemir, U. Karakas, M.S. Beksac and N. Cakar]

"Design and Implementation of Semi-Automated System for Fetal Head Images," *11th Informatique Conference of Turkey,* Istanbul, Turkey, (Sept. 14-17, 1994) in Turkish. [with H.T. Ozdemir and U. Karakas]

TECHNICAL REPORTS

"Parallel and Metacomputing Support for CMS - Comprehensive Minefield Simulation, Demonstration Handout", Supercomputing 98, Orlando, FL, November 7-13, 1998. [with D. Bernholdt, P. Chappell, G. C. Fox, W. Furmanski, D. Kasthuril, G. Krishnamurthy, S. Nair, H. T. Ozdemir, K. Rangarajan and K. Snively]

"Integrating Web, Desktop, Enterprise and Military Simulation Technologies To Enable World-Wide Scalable Televirtual (TVR) Environments", 1998, [with Geofrey C. Fox and Wojtek Furmanski,B. Natarajan, H.T. Ozdemir, S. Pallickara and T. Pulikal]

"Building Web/Commodity based Visual Authoring Environments for Distributed Object/Component Applications - A Case Study using NPAC WebFlow System", 1998, [with E. Akarsu, G.C.Fox, W. Furmanski, T. Haupt, H.T. Ozdemir, S. Pallickara and T. Pulikal]

"Genetic Algorithms and Applications," *Hacettepe University Computer Science and Engineering Department Technical Report,* (1992). [with H.T. Ozdemir]

"MYDEARBABY Project Report: Expert System that monitorizes Fetal Heart Rate," *Hacettepe University Computer Scince and Engineering Department Technical Report,* (1991). [with H.T. Ozdemir and U. Karakas]

PRESENTATIONS

"Parallel and Metacomputing Support for CMS - Comprehensive Minefield Simulation", Supercomputing 98 Demonstration, Orlando, FL, November 7-13, 1998. [with H. T. Ozdemir] published in ASC MSRC Journal.

MEMBERSHIPS

IEEE - student member since 1998

REFERENCES

Provided upon request