Naim Alper, PhD

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7 Brandon Road West Pennington, NJ 08534 USA

Education

- University of California, Santa Cruz. Ph.D., Computer Engineering, 1995. Dissertation title, "Mix&Match: A Construction Kit for Scientific Visualization".
- Santa Clara University. M.S., Computer Engineering, 1989. 3.87
 GPA. Emphasis on Database Management Systems.
- Institute of Education, London University, U.K.. P.G.C.E., Education, 1980. Awarded a mark of distinction.
- Trinity College, Cambridge University, U. K.. B.A., Engineering, 1979. Emphasis on power engineering.

Awards

- Non-resident tuition fellowship, 1989 1993.
- CASP (Cyprus America Scholarship Program) scholarship for Master's degree.

Technical Skills

Languages: Java, Ruby, Javascript, C, Perl, HTML, XML, KML, SQL, UML

Frameworks: JSF,Tapestry,Apache-CXF,Spring,Hibernate,Swing

Software: Eclipse, Maven, Jenkins, JIRA, Confluence, SVN, Git,

 $\label{lem:condition} JQuery, JUnit, Free marker, Neo 4J, Open GL, GrADS, World Wind Grand Gra$

Concepts: Object Oriented Design, Service Oriented Architecture,

Design Patterns, Agile Development, Test Driven Development

Platforms: Unix/Linux, Mac OS X, Windows

Others: Servlets, Web Services, Apache Tomcat, MySQL, Docker

Professional Experience

Software Dev. Sr. Specialist Advisor, NTT Data Services, Pennington, NJ - 1/2018-Current

Working on a tool for Cloud readiness assessment to add to the NTT DATA Repository product. Added ANTLR based parsers for several Object Oriented languages.

Software Developer Consultant, NTT Data Services (formerly DELL Services), Vancouver, BC - 6/2014-1/2018

Worked on a small, distributed, Agile product development team, mainly on the NTT DATA Repository product, a JSF/Java EE web application used for Application Modernization. Implemented feature enhancements and bug fixes to a mature product. Wrote a report generation component using Freemarker as a template engine populated by an API to a MySQL database and a Docker container. Developed Javascript components to visualize Graph and Tree structures using D3. Wrote JRuby scripts to generate JSON data to be consumed by the above. Implemented a service that manages embedded Neo4J databases to be used by JRuby scripts.

Senior Software Developer, Droplet Software Consulting, Vancouver, BC — 11/2007-2/2014

Worked as a sub-contractor to AER, Inc. on the Environmental Data Cube (EDC) project as part of a distributed team of developers. Took part in the design and development of many components of the Tapestry based front-end and the supporting services on the back end. Developed a product server that could add GrADS based product layers over maps obtained from a WMS map server. Developed a NASA WorldWind based desktop Java application to generate and view layers from data obtained from projects from the EDC distributor. Developed many components for the EDC provider site to generate visual and nonvisual products. Developed data format encoders/decoders. Developed a JavaScript based webapp to view EDC product layers over Google maps. Developed an extension to OpenGrads in C to write out the current GrADS graphics content in KML.

Senior Software Developer, Vancouver, BC - 7/1997-11/2007

Worked as an offsite consultant through SAIC as part of a distributed team of developers. Was responsible for the whole of the access site software on the Master Environmental Library (MEL) project and the components interacting with MEL in the Environmental Scenario Generator (ESG) project. Developed a Swing based spreadsheet image viewer, a MEL CORBA client component and an XML based component for the ESG project. Wrote an RMI and/or Axis based Catalog Server to serve queries to the metadata catalog using several underlying native XML databases. Wrote a Java applet to query, browse and order resources from the catalog server. Developed an XML based core metadata schema to describe ESG resources that populated the catalog. Developed flow visualization tools for the metadata resources. Developed a desktop Java application for viewing and analyzing

environmental data. Participated extensively in the initially JSP/Struts based and later Tapestry based ESG web application development.

Software Developer, Monterey, CA — MAR, Inc. 7/1995-1/1997, SAIC 1/1997-7/1997

Worked as an onsite contractor for the Naval Research Laboratory in Monterey, California on the Master Environmental Library (MEL) project. Designed and developed Java search and results interfaces for MEL and the National Geospatial Data Clearinghouse(published in the Proceedings of IEEE Information Visualization, 1996 and featured in the book "Core Web Programming" by Marty Hall and Larry Brown, 2001). Designed and developed a visualization server and a map server. Responsibilities included the application of emerging technologies such as Java and VRML to the MEL project, the NEONS database administration, and the development of new visualization tools for meteorological data.

Post Doctoral Researcher, UCSC, Santa Cruz, CA; 4/1995-7/1995
Took part in the redesign of the visualization software of the REINAS project. Designed and implemented the geometry API and the renderer in OpenGL.

Summer Intern, Borland International; Scotts valley, CA — 1990-1992 Designed and implemented test suites for the expression engine of the Paradox for Windows RDBMS and the Borland Large Objects feature of the C engine of Paradox on MSDOS.

Production Engineer, Compusonics; Palo Alto, CA — 12/1986-8/1987Responsibilities included the supervision of production and the testing and troubleshooting of state-of-the-art digital audio system.

Database Administrator, Information Express; Palo Alto, CA – 4/1985-7/1986

Designed, implemented and maintained an RDBMS application for the Apple Macintosh.

Other Job Experience

High School Teacher, 9/82 - 11/84.

Turk Maarif Koleji. Turkish Republic of Northern Cyprus. Taught mathematics, physics and technical drawing.

Reserve Communications Officer, 8/80 - 6/82

National Security Forces, Turkish Republic of Northern Cyprus. Responsible for the training of personnel and the operation and maintenance of communications equipment of a battalion.

Publications

- "MEL: An Internet Based Distributed Geospatial Data Discovery And Retrieval System" with Richard Siquig, Chuck Stein, John Kent, Steve Lowe, Jim Corbin, Valentine Anantharaj, Billy Chambless and Ed Clark.Proceedings, SCS Simulation Multi-Conference 1997, Simulation Series 29(4), April 1997.
- "A Master Environmental Library (MEL)" with Richard Siquig, Chuck Stein and Steve Lowe. Proceedings, Simulation Technology Training, March 1997.
- "Product Generation within the Master Environmental Library (MEL)" with Steve Lowe, Chuck Stein, Richard Siquig, Janice Boyd, Jim Corbin and Valentine Anantharaj. Proceedings, Simulation Interoperability Workshop, March 1997.
- "Geospatial Metadata Querying and Visualization on the WWW Using Java Applets", with Chuck Stein. Proceedings, IEEE Symposium on Information Visualization, October 1996.
- "Bump Mapped Vector Fields", with Alex Pang. SPIE Proceedings, February 1995.
- "Mix&Match: A Construction Kit for Visualization", with Alex Pang. Proceedings, IEEE Visualization 1994.
- "Design Issues of Spray Rendering", with Alex Pang, Jeffrey Furman and Jiahua Wang. Proceedings, Compugraphics 1993.
- "Visualization of Wave Propagation Through a 3D Strand of Myocardium", with Alex Pang and Boris Kogan. Proceedings, 5th IEEE Symposium on Computer-Based Medical Systems, October, 1992.
- "Direct Volume Rendering of Curvilinear Volumes", with Jane Wilhelms, Judy Challinger, Shankar Ramamoorthy and Arsi Vaziri. Computer Graphics, 24(5), December 1990. San Diego Volume Visualization Workshop Proceedings.

Posters and Presentations

Mix&Match and CSpray demonstration at the IEEE Visualization 1994.
 Demonstrated the visualization environment resulting from thesis work and a collaborative version based on it on the vendor exhibit floor.

Services

- Represented the MEL project as member of the design review panel for the Alexandria Digital Library project.
- Reviewed for the special issue on Information Visualization of IEEE Computer Graphics & Applications, 1996.

 Reviewed for the ACM Volume Visualization Workshop, 1994. Student Volunteer, IEEE Visualization 1993, 1994.