

Serkan B. Bozkurt

Strengths

Led several GIS and internet related projects. Experienced as working independently and as a member of a team. Expert in wide range of GIS practices including 3D scientific visualizations, GIS animations, GIS analysis, internet mapping technologies, database design, rapid response GIS solutions for disaster recovery and mitigation, information management, space imagery and aerial photography processing, digital elevation models, mobile GIS, digital data collections and productions, mapping, business geographic, and GPS technologies including GPS communication protocols, real-time and offline data collection, vehicle tracking systems, GPS navigation systems, GPS units for PDA and cell phones.

Experience

Jan 2002 – present

*U.S. Geological Survey, Earthquake Hazard Team, Menlo Park, CA
Earthquake and Volcano Deformation and Stress Triggering Research Group*

Principal GIS Professional & Web Developer

In the four years I have been with the USGS, I have worked on two of the Group's largest externally funded programs. These include two grants totaling \$200K from NASA, and a \$300K Cooperative R&D Agreement with Swiss Re (Zurich). The Group has been recently awarded a new grant from US Agency for International Development (USAID), Office of Foreign Disaster Assistance.

- Principal GIS professional for "Earthquake Probability Investigation of Greater Tokyo Project", a Cooperative R&D Agreement with Swiss Reinsurance Co. [[link](#)]
- Principal GIS professional for the Stress Triggering Research Group, focusing on 3D visualization, internet mapping and computer animation technologies [[link](#)]
- Developed an internet mapping website at the request of NASA [[link](#)]
- Authored, coauthored, and participated in several published research studies with GIS analysis and visualizations
- Created rapid response maps and 3D visualizations after major earthquakes
- Appeared at the cover of Nature journal by a GIS visualization [[link](#)]
- Created GIS visualizations and animation to publish scientific results [[links: 1, 2, 3](#)]
- Invited to give talks about GIS and 3D scientific visualizations to NIED-Japan, ETH-Switzerland, SCEC-USA, and ESRI UC2004-USA
- Developed and maintained group and project websites that currently receive over half a million hits per year [[links: 1, 2, 3](#)]
- Installed and maintained internet servers including Apache, PHP, MySQL
- Consulted and trained team members about GIS, graphic design, and IT circumstances, such as computer security, firewalls, VPNs, and operating systems
- Consulted as an earth scientist and 3D GIS animator for an IMAX film entitled 'Forces of Nature' [[link](#)], also participated in other documentary films with GIS animations and visualizations, including 'Earthquake Storms' by BBC, and 'Nature Tech, Earthquakes' by The History Channel
- Awarded to "2005 Achieving Results Award" by USGS Acting Director and Team Chief Scientist

Sep 1998 – Nov 2001

*TED Teknolojik Egitimsel Danismanlik, Ltd. Istanbul/TURKEY
IMAGINS, Jersey City, NJ / USA*

Principal GIS – GPS Professional

By the end of my first year at TED-IMAGINS, I was promoted to the position of Principal GIS-GPS Professional. I led a group of 3 full-time and several half-time GIS personnel to conduct cutting-edge GIS and GPS services including development of disaster recovery GIS solutions, GIS analysis, computer mapping using space imagery, data collection using GPS enabled mobile GIS platforms, vehicle tracking and fleet management solutions, location based services, technology research and development.

- GIS leader for Istanbul Geographic Information Sharing System, which developed jointly with Bogazici University Kandilli Observatory and Earthquake Research Institute
- GIS leader for Kocaeli and Duzce Disaster Recovery Geographic Information Sharing Systems
- Provided technical leadership to Location Based Services with IMAGINS' technology partners
- Developed and maintained TED-IMAGINS spatial data and mapping warehouse
- Supervised internet mapping application developments
- Developed and implemented field data collection protocols that use GPS-enabled devices
- Supervised field data collection work with mobile GIS-GPS technologies,
- Designed numerous GIS database structures
- Compiled and geo-rectified various digital and paper maps, and conducted field verification work
- Developed digital maps for Automatic Vehicle Location and Fleet Management systems
- Developed a real-time GIS application, which mapped preliminary election results for NTV, Turkey's leading TV news station
- Supported marketing and sales department with visual and technical materials, also participated in sales meetings
- Provided GIS, Differential GPS, and digital video production support services for field work in ground-truthing of satellite-based earthquake damage assessments in Kocaeli and Sakarya, Turkey in collaboration with US and Japanese earth scientists
- Maintained and enhanced Differential GPS product lines and subscriptions
- Collected GPS-tagged multimedia materials, including digital video and 360 degree VR scenes

Nov 1995 – Nov 1997

ULASIM ART

Istanbul / Turkey

Urban Transportation Planner

- Built 1/5,000 scale transportation plan for Kadikoy (Istanbul) Municipality with a team of 5
- Supervised field surveyors and data conversion clerks
- Utilization of the first real-time differential GPS broadcast for field data collection
- Consulted contractors on transportation plan implementation

Education

Master of City Planning (Geographic Information Systems on Disaster Management)

Mimar Sinan University, Institute of Science and Technology, Istanbul / Turkey, 2000

Bachelor of City Planning (Urban Planning)

Mimar Sinan University, Faculty of Architecture, Istanbul / Turkey, 1996

Known GIS tools

ArcGIS 9 suite, ArcIMS, ArcSDE, ArcInfo command line, MapInfo Professional, MapInfo MapX, Autocad Map, Autodesk Mapguide, Micro Station, RSI-ENVI, Erdas IMAGINE, Global Mapper, Winfleet, AccuTracker, and various other GIS-GPS tools.

Known computer languages & applications

HTML, PHP, MySQL, Apache, Action Script/SWF, Java-Script, DOS and UNIX command line, Macromedia Flash, Macromedia Dreamweaver, Adobe PhotoShop, Adobe Illustrator, Adobe Distiller, Adobe Acrobat, Adobe Premiere, NewTek VT and various other PC and Macintosh software. Active computer user since 1985 with experienced in DOS, Windows, Mac OS 9 and Mac OS X (Unix).

Publications

- S. B. Bozkurt, R. S. Stein, and S. Toda, Forecasting probabilistic seismic shaking for greater Tokyo based on 400 years of intensity observations, *to be submitted, 2006*.
- S. Toda, R. S. Stein, S. B. Bozkurt, J. Nakajima, A. Hasegawa, and S. H. Kirby, A dislodged tectonic block wedged beneath Tokyo: Consequences for earthquakes, volcanism, and geography, *to be submitted, 2006*.
- S. Toda, R. S. Stein, K. Richards-Dinger and S. Bozkurt, Forecasting the evolution of seismicity in southern California: Animations built on earthquake stress transfer. *J. Geophys. Res., Vol. 110, B05S16, doi:10.1029/2004JB003415, 2005*.
- S. B. Bozkurt. Earthquake Probability Investigation of Greater Tokyo. *ESRI Map Book, Vol. 20, p. 86, ISBN: 1-58948-133, 2004*.
- M. Petal, S. Ulgen, S. B. Bozkurt, and G. Karaoglu, Disaster Region Geo-spatial Information Sharing System (DR.GISS) Project Report, *2001*.
- S. B. Bozkurt. Use of GIS in Disaster Management, *Mimar Sinan University Master Thesis Publications, 2000*.
- S. B. Bozkurt. Transportation and Urbanization, *Mimar Sinan University Bachelor's Degree Thesis Publications, 1996*.

References

Available upon request.