# Volkan Sevilgen

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# **Current Position** (Since Aug 2006)

Foreign Exchange visitor at US Geological Survey, Earthquake Hazards Team, Earthquake and Volcano Deformation and Stress Triggering Modeling Group.

# **Work Experience**

#### 2002-2006

Started Dijitalpazar.com.tr company with Serkan Sevilgen in IT business. Created web-based software, database and marketing solutions.

#### **Education**

MSc, 2003 – 2006, Istanbul Tech. Univ., Dept. of Geophysical Engineering, Istanbul BSc, 1998 - 2003, Istanbul Tech. Univ., Dept. of Geophysical Engineering, Istanbul

#### **Internships**

#### Sep-Oct, 2003

# Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine

Studied the Ukrainian programs of seismic modeling and processing and tested Tesseral 2-D Full-Wave Modeling Package and processed real seismic reflection data from Carpathian region using the Seismic Processing System (SPC-PC)

#### Aug 2002

# Istanbul Technical University, Department of Geophysical Engineering,

Studied earthquake loss reduction and researched earthquake intensities to create a new method for rapid earthquake intensity determination. Studied on Intensity scales and intensity observation questionnaires. Created a prototype web database and online interfaces to test the system with random data.

#### July-Sep, 2001

The Scientific and Technical Research Council of Turkey (TUBITAK), Earth and Marine Sciences Research Institute, Participated in SEISMARMARA Project, and processed earthquake data from Marmara region. Participated in marine seismic researches on French vessel Le Nadir and seismic station deployment.

Participated in preparing Ocean Bottom Seismographs (OBS) for Marmara cruise Processed earthquake data via PQL-SAC package on Sun Microsystems and found earthquake locations and focal mechanisms.

#### Feb 2000

**UBM Geophysics Company, Istanbul**, Participating field campaigns and works with seismic methods using different seismic sources for soil investigations.

#### Languages

Turkish (native)

English TOEFL score: 94/120

(Reading: 25/30, Listening: 27/30, Speaking: 22/30, Writing: 20/30)

#### **Computer Skills**

MAC and Windows OS

Seismic Processing System (SPC - PC), Tesseral 2-D Full Wave Modeling Package

Mapping Software: ArcGIS, Golden Software Surfer, Grapher.

Programming Languages: MATLAB, PHP, FORTRAN.

Office Packages: Microsoft Word, Excel, Power Point, Open Office.

Web Development Software Macromedia Dreamweaver

Graphic Design Software: Adobe Photoshop, Fireworks, Illustrator

Computer Hardware, Networking, TCP-IP, FTP, Web Server Management Software

#### Scientific Project websites (Designed and Maintained)

Team Tokyo project: <a href="http://sicarius.wr.usgs.gov/tokyo/">http://sicarius.wr.usgs.gov/tokyo/</a>

GEM (Global Earthquake Model) <a href="http://www.globalquakemodel.org">http://www.globalquakemodel.org</a>

Coulomb Stress: <a href="http://www.coulombstress.org">http://www.coulombstress.org</a>

Kanto Fragment paper: http://sicarius.wr.usgs.gov/fragment/

USGS Group: <a href="http://quake.wr.usgs.gov/~ross/">http://quake.wr.usgs.gov/~ross/</a>

Deprem Raporu (Earthquake Report) <a href="http://www.depremraporu.com">http://www.depremraporu.com</a>

#### **Hobbies**

Yoga, Scuba Diving, Photography

# Publications (Available at http://www.sevilgen.net)

Hauksson, E., Felzer, K., Given, D., Giveon, M., Hough, S., Hutton, K., Kanamori, H., Sevilgen, V., Wei, S., and Yong, A.

Preliminary report on the 29 July 2008 Mw5.4 Chino Hills, Eastern Los Angeles basin, California, earthquake sequence, 79, 6, 10.1785/gssrl.79.6.855, SRL, 2008

Toda, S., Stein, R.S., Lin, J., and Sevilgen, V.

Coulomb 3.1 User's Guide, available at <a href="http://www.coulombstress.org">http://www.coulombstress.org</a>, 2008

Carton, H., S. C. Singh, A. Hirn, S. Bazin, B. de Voogd, A. Vigner, A. Ricolleau, S. Cetin, N. Oçakoglu, F. Karakoç, and V. Sevilgen

Seismic imaging of the three-dimensional architecture of the Çinarcik Basin along the North Anatolian Fault, J. Geophys. Res., 112, B06101, doi:10.1029/2006JB004548 21 June 2007

# V. Sevilgen,

Calculation Earthquake Intensity Distribution via the Internet, MSc. Thesis, Istanbul Technical University, Dept. of Geophysical Engineering, 2006.

V. Sevilgen,

A New Aproach to Determine Earthquake Intensity Distribution, BSc. Thesis, Istanbul Technical University, Dept. of Geophysical Engineering, 2003.

S. Singh, A. Hirn, S. Basin, B. Voogd, A. Vigner, A. Ricolleau, S. Cetin, N. Ocakoglu, F. Karakoy and V. Sevilgen

SEISMARMARA Cruise Report, prepared by S. Singh, IPGP France, 2001.

#### **Presentations**

Sevilgen, V.

Coulomb Stress Analysis of the 21 February 2008 Mw= 6.0 Wells, Nevada, Earthquake, Eos Trans. AGU, 89(52), Fall Meet. Suppl., Abstract S51B-1746, 2008

V. Sevilgen

Coulomb Stress Analysis for Mw= 5.4 Alum Rock Earthquake, 11/20/07, Oral presentation at USGS Menlo Park.

Toda, S., Stein, R.S., Lin, J., and Sevilgen, V.

Coulomb Teaching, Apr 29-30, Aug 9, Sep 9, Dec 8 and 15, 2007 Coulomb Class Video Dec 8, 2007 (4 parts 5 hours 37 min total)

Toda, S., Lin, J., Sevilgen, V. and Stein, R.S.

Coulomb 3.0, an Interactive Tool for Studying Earthquake Interactions, poster, Statistical Seismology: Physical and Stochastic Modelling of Earthquake Occurrence and Forecasting, "Ettore Majorana" Foundation and Centre for Scientific Culture, 2007

Toda, S., Lin, J., Sevilgen, V. and Stein, R.S.

Coulomb 3.0, an interactive tool for studying earthquake interactions, conference talk at, 2007 annual meeting of Seismological Society of America, Kona, Hawaii, USA, April 2007.

V. Sevilgen, H. Eyidogan,

Calculation of the Earthquake Intensity via the Internet, poster, 17th International Geophysical Congress & Exibition by CGET, Turkey 2006.

# Ministry of Education and Science of Ukraine Ivano-Frankivsk National Technical University of Oil and Gas

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Volkan Sevilgen has worked at the Department of geophysics, Ivano-Frankivsk National technical university of oil and gas in Ukraine as a trainee under IAESTE exchange program during september-october 2003 y. He studied the ukranian programmes of seismic modelling and processing.

During his practical training, Volkan Sevilgen has proved to be a competent, executive and creative student. Excellent possession of English, methods of mathematical data processing and various computer programs have allowed him to carry out successful research.

Within the time of training Volkan received the following occupations:

- practical tested of Tesseral 2-D Full-Wave Modelling Package on the models of real geological object;
- successfully processed seismic data of profilling at the Carpatian area in Seismic Processing System (SPS-PC).

Volkan Sevilgen proved excellent quality to work in groups and has proved to be a friendly and contact person.

In conclusion we have appreciated Volkan Sevilgen as participation in our research work at the department. We would encourage Mr Volkan to continue his research in future.

Supervisor

N. Ganzhenko

Head of the department

V. Stepanjuk