

BIOGRAPHICAL SKETCH

Ilya Zaslavsky is a Geographic Information Systems (GIS) and spatial data analysis specialist, with experience in university-level research, training and project management. He received his Ph.D. from University of Washington (1995) for research on statistical analysis and reasoning models for geographic data in multi-layer GIS. Previously, he received a Candidate of Sciences degree (Ph.D. equivalent) from the Soviet Academy of Sciences, Institute of Geography, for a study of metropolitan evolution (1990), and an M.A. equivalent from Moscow State University (Moscow, USSR) where he developed simulation models of urban systems. Between 1995-98, Zaslavsky was on the faculty at Western Michigan University (WMU), Department of Geography. In 1997-99, he worked for the Education Center on Computational Science and Engineering at San Diego State University, where he was the lead developer of Sociology Workbench, a collection of on-line tools for social scientists and data analysts. During 1997/98, he taught his regular classes at WMU from San Diego in real time, using web-based collaborative software. In March 2000, he joined the Enabling Technologies group of the San Diego Supercomputer Center. His research focuses on spatial databases, Web-based GIS, and XML-based mediation between heterogeneous geographic sources.

Dr. Zaslavsky's **research interests and experience** include:

- Geographic Information Systems, specifically: spatial analysis with GIS, syllogistics in GIS, business and environmental applications of GIS, GIS interoperability, GIS on the Web
- Methods and software for exploratory social data analysis
- Evolution of metropolitan areas, and dynamic simulation modeling of urban systems
- Synchronous distance learning and web-based collaboration

Employment

2000 - present	Research Scientist (pending), SDSC, UC-San Diego.
1997 - 2000	GIS Staff Scientist , Education Center on Computational Science and Engineering, and Adjunct Professor , Mathematical and Computer Sciences, San Diego State University Research and faculty training in high performance computational tools for sciences and engineering curricula.
1995 - 1998	Assistant Professor of Geography , Western Michigan University, Kalamazoo, MI Teaching regular courses in Geographic Information Systems, Computer Cartography and Statistical Analysis in Geography, Urban Planning.
1993, 1995	GIS Programmer/Systems Analyst , Schlosser Geographic Systems, Seattle, WA Programming for various business applications of GIS, in various languages.
1987 - 1991	Research Scientist , Institute of Geography, USSR Academy of Sciences, Moscow, USSR Research on metropolitan evolution; development of cartographic databases; scientific secretary of the Laboratory of Population Geography 1988-90.
1987 - 1991	Consultant, Software Engineer , Research Center "ROST", Small Enterprise "Context", Moscow, USSR. Software and applications of determinacy analysis, a frequency analysis of multidimensional contingency tables)
1985 - 1987	Head of Software Design Group, Associate Economist, Assistant Economist , State Institute for Urban Planning, Moscow, Russia

Five Relevant Publications

- A. Gupta, I. Zaslavsky, R. Marciano, 2000. "Generating Query Evaluation Plans within a Spatial Mediation Framework". Forthcoming in Proceedings of the 9th International Symposium on Spatial Data Handling, Beijing, China.
- I. Zaslavsky, A. Gupta, R. Marciano, C. Baru, 2000. "XML-based Spatial Data Mediation Infrastructure for Global Interoperability". Proceedings of the 4th Global Spatial Data Infrastructure Conference, March 2000. (Available from <http://www.gsdi.org/capetown/program.htm>)
- A. Gupta, R. Marciano, I. Zaslavsky, C. Baru,, 1999. "Integrating GIS and Imagery through XML-Based Information Mediation". In P. Agouris and A. Stefanidis (Eds.) *Integrated Spatial Databases: Digital Images and GIS*, Lecture Notes in Computer Science, Vol. 1737 (a preliminary version, presented at NSF International Workshop on Integrated Spatial Databases in June '99, is available from <http://www.npaci.edu/DICE/Pubs/>)
- Zaslavsky, Ilya. 1997. "Reasoning-Based Strategies for Processing Complex Spatial Queries" *Proceedings of the 1997 ACSM/ASPRS Annual Convention and Exposition* (Seattle, WA, April 7-10), Vol. 5 (Auto-Carto 13), pp. 106-115.
- Zaslavsky, Ilya. 1995. "Analysis of Association between Categorical Maps in Multi-Layer GIS". *Proceedings of GIS/LIS'95* (Nashville, TN, November 14-16, 1995), Vol. 2, pp. 1066-1074.

Other Publications

- Zaslavsky, Ilya, and Naimark, Naum. 1999. "Development of the Urban Planning Cadastre in Russia". In J. Stillwell, S. Geertman, S. Openshaw (Eds.) *Geographical Information and Planning*, Springer-Verlag; pp. 154-169.
- Zaslavsky, Ilya, and Baker, Kathleen. 1998. "The Experimental Web-based Interactive Environment in Distance Teaching of GIS and Geographic Data Handling" *Proceedings of the 1998 ACSM Annual Convention and Exhibition* (Baltimore, MD, March 1-5), Vol. 2, pp. 437-446.
- Stewart, Kris, and Zaslavsky, Ilya, 1998. "Building the Infrastructure for High Performance Computing in Undergraduate Curricula: Ten Grand Challenges and the Response of the NPACI Education Center". *Proceedings of SC'98: High Performance Networking and Computing* (Orlando, FL, November 7-13).
- Zaslavsky, Ilya, and Craig ZumBrunnen. 1992. "Soviet Urban Geography Since the Time of Perestroika". Epilogue to *Urban Geography in the Soviet Union and the United States*. Lahman, MA: Rowman & Littlefield Publishers, Inc., pp. 203-211.

Other selected highlights

- Microsoft Case Study in Higher Education featuring Zaslavsky's collaborative distance teaching experiment (12/98): www.microsoft.com/education/hed/studies/caseh55.htm
- Organized and directed Michigan GIS Institute (1997/99): www.wmich.edu/geography/GISinstitute/
- Designer and lead developer of "Sociology Workbench", a collection of on-line tools for survey data analysis on the Web (1998 – present): <http://edcenter.sdsu.edu>
- "Best student paper" award from the GIS Specialty Group of the Association of American Geographers (1995).
- Grants: NSF DUE (1996, Co-PI), WMU FRACASF grant (1997/98), WMU VSAC award (1996/97)

Recent collaborators:

Chaitanya Baru, Richard Marciano, Amarnath Gupta (SDSC), Kris Stewart (San Diego State University)

Graduate advisor:

Nicholas Chrisman, University of Washington