

CURRICULUM VITAE
Helena Mitasova

Academic Background

- 1987 Ph.D. in Geodesy and Cartography, College of Civil Engineering, Slovak Technical University, Bratislava, Czechoslovakia
1981 M.S. (dipl. Ing) in Geodesy and Cartography, College of Civil Engineering, Slovak Technical University with the Highest Scholastic Honors, Bratislava, Czechoslovakia

Academic/Research Experience:

- 2008 – present: Associate Professor, Department of Marine, Earth and Atmospheric Sciences (MEAS), North Carolina State University (NCSU), Raleigh
2004 - 2007: Research Assistant Professor, MEAS, NCSU, Raleigh
2001- 2004: National Research Council Senior Research Associate, Associate Adjunct Professor, MEAS, NCSU, Raleigh; Associate Adjunct Professor, Department of Geography, University of North Carolina, Chapel Hill;
1995 - 2001: Research Scientist, Geographic Modeling Systems Laboratory, Department of Geography, University of Illinois at Urbana-Champaign,
1991 - 1995: Research Scientist, U.S. Army Construction Engineering Research Laboratories (USA CERL), Champaign, Illinois (under Interagency Personnel Agreement),
1990 - 1991: Visiting Research Scientist, Illinois Natural History Survey and Department of Forestry, University of Illinois at Urbana-Champaign,
1983 - 1990: Research Scientist, Department of Physical Geography and Cartography, Comenius University, Bratislava, Czechoslovakia,
1981 - 1982: Research Assistant, Department of Mapping, Slovak Technical University, Bratislava, Czechoslovakia.

Membership in professional organizations

- Geological Society of America: 2001-present
American Geophysical Union: 1998-present
International Environmental Modelling and Software Society: 2006-present
International Association for Landscape Ecology 1993-2004
US Green Building Council – NC Triangle chapter – 2005-present

Scholarly and professional honors:

- Biennial Medal from the International Environmental Modeling and Software Society for outstanding contributions to environmental modeling and software, 2006
Elected member of Open Source Geospatial Foundation, 2006
National Research Council Senior Research Associate Fellowship, 2001 - 2003
Excellence in development award from Open Geographic Information Systems Foundation 1994

Professional service:

Member, GRASS GIS project steering committee: 2006 - present
Member, Editorial Board for the journal Transactions in GIS: 2000 - present
Member, steering committee for the International Open source GIS conferences : 2002
Trento, Italy, 2004 Bangkok, Thailand, 2006 Lausanne, Switzerland
Member, Scientific Board for GIS Planet Conference 2005, Lisbon, Portugal
Co-Organizer: 32 Int. Geological congress, Italy, 2004 Topical symposium T08.1 Synergy
of GIS technology and the Earth Sciences: current state and future prospects
Graduate committee member: NCSU MEAS, Soil Science, Physics, Forestry; UNC Chapel
Hill, Geography, Computer science; Duke Computer science; Politecnico di Milano,
Civil and Env. Engineering, Como, Italy
Reviewer for IEEE GRSL, Geomorphology, Journal of Coastal Research, Catena,
Computers and Geosciences, Int. Journal for Geographic Information Science,
Remote Sensing of Environment, Journal of Environmental Management, Journal of
Environmental Informatics and others
Reviewer for proposals in the geoinformation sciences and environmental modeling: NSF,
ARO, DOE, NC WRRI, and other agencies

Selected Recent Publications

- Neteler, M. and Mitasova, H. 2008, Open source GIS: A GRASS GIS Approach, Third
Edition. Springer, New York, 419 p, in press.
- Hofierka J., Mitasova, H. and Neteler, M., 2007, Geomorphometry in GRASS GIS, In:
Geomorphometry: Concepts, Software, Applications, T. Hengl and H. I. Reuter (eds.),
Elsevier, in press.
- Mitasova, H., Neteler, M., Mitas, L. and Harmon, R.S., 2007, Environmental Data
Management, Analysis and Modeling in GRASS6. Proc. ISESS Prague 2007
- Mitasova, H., Mitas, L., Ratti, C., Ishii, H., Alonso J., and Harmon, R.S., 2006, Real-time
Human Interaction With Landscape Models Using a Tangible Geospatial Modeling
Environment, IEEE Computer Graphics & Applications, 26(4), pp 55-63.
- Mitasova, H., Mitas, L. and Harmon, R.S. 2005 Simultaneous spline interpolation and
topographic analysis for lidar elevation data: methods for Open source GIS, IEEE
GRSL, 2(4), pp. 375- 379.
- Mitasova, H., Overton, M., Harmon, R.S., 2005, Geospatial analysis of a coastal sand
dune field evolution: Jockey's Ridge, North Carolina, Geomorphology 72, pp 204-221.
- Mitasova, H., Drake, T.G., Harmon, R.S., Bernstein, D. 2004. Quantifying rapid changes
in coastal topography using modern mapping techniques and GIS, Environmental and
Engineering Geoscience, 10(1), 1-11.
- Mitasova, H., Thaxton, C., Hofierka, J., McLaughlin, R., Moore, A., Mitas L., 2004, Path
sampling method for modeling overland water flow, sediment transport and short term
terrain evolution in Open Source GIS. In: C.T. Miller, M.W. Farthing, V.G. Gray, G.F.
Pinder eds., Computational Methods in Water Resources, Elsevier, pp. 1479-1490.