

MIKE LACKNER

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EDUCATION

Masters of Science in Geography, Fall 2006

University of Toronto, Toronto, ON (Supervisors: Dr. Tenley Conway, Dr. Jing Chen)

Thesis: **An Object-Oriented Approach to Urban Land-Cover and Land-Use Classification**

Also published as: **Object-Oriented Image Analysis**. March 2008. VDM Verlag Dr. Mueller.
ISBN: 3836481669. 156 pages.

Bachelor of Arts (with High Honors) in Geography, Spring 2003

Portland State University, Portland, OR (Supervisor: Dr. Joe Poracsky)

Research Project: **Urban Forest Canopy Cover: Portland, Oregon, 1972-2002**

SOFTWARE / TECHNICAL SKILLS

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|-----------------|-------------|--|
| • ArcGIS | • GPS | • VBA, Python Scripting |
| • ArcView | • S-Plus | • Operating systems: Windows, UNIX |
| • Erdas Imagine | • R | • MS Office Suite (Access, Excel, Word, PowerPoint, FrontPage) |
| • PCI | • SPSS | • Adobe Photoshop, Illustrator |
| • ENVI | • Fragstats | • CorelDraw |
| • eCognition | • GRASS | |
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WORK EXPERIENCE

Remote Sensing & Geospatial Analyst (November 2008 – present)

4DM Inc.

- Production of DEMs from LiDAR and orthophoto imagery for hydrological modeling.
- Extracted sub-aquatic vegetation from QuickBird imagery that was atmospherically corrected.
- Analysis of Landsat thermal bands for water change detection and spatial resolution effects.

Remote Sensing/GIS Analyst (March 2007 – October 2008)

University of Toronto

- Performed object-based classification of Landsat imagery for Southern Ontario region.
- Explored Ikonos imagery and hemispheric pictures for urban forest canopy classification.
- Compiled and rectified aerial photography for historical analysis of Toronto's waterfront.
- Analyzed spatial evolution of power retail phenomenon within the Greater Toronto Area.

Sessional Lecturer (September 2007 – December 2007)

University of Toronto

- Taught course "Geographic Information and Mapping I" at second-year university level.
- Delivered lectures, prepared exams, and assessed course work for 100 students.
- Supervised four teaching assistants for managing six lab sections.

Teaching Assistant (September 2004 – December 2006)

University of Toronto

- Lead laboratory part of courses related to GIS, geostatistics, and physical geography.
- Prepared and presented lab material, including assignments and lab exercises.
- Graded exams and assignments.

Research Assistant (May – August 2005, May – August 2006)

University of Toronto – Cartography Center

- Collected GIS data related to Toronto's urban growth to produce maps and reports.
- Automated geocoding procedures for non-spatial data in different formats.
- Performed various other GIS and cartographic tasks.

Remote Sensing/GIS Technician

(October 2003 – August 2004)

Space Imaging (Portland, Oregon)

- Analyzed land-cover of Washington's and Oregon's coastal areas, using Landsat imagery.
- Performed imagery-based quality control of canopy and pervious-impervious classifications.
- Implemented modeling steps and conducted quality control on urban classification project.

Research Assistant

(August 2002 – June 2003)

Portland State University – Cartographic Center

- Analyzed Portland's tree canopy cover, using aerial photography and Landsat imagery.
- Compared data from three decades to produce maps, tabular output, reports, and a website.
- Prepared several presentations for public meetings and conferences.

SELECTED COURSEWORK

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| • GIS I & II: Introduction and Applications | • Landscape Biogeography |
| • Advanced GIS | • Visual Image Analysis |
| • Maps and Models | • Digital Image Analysis |
| • Quantitative Methods for Geography | • Accuracy of Spatial Databases and Geostatistics |
| • Map Design and Production | • Dreamweaver Web Design and Maps |
| • Urban Geography | |

SCHOLARSHIPS / AWARDS

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|---|-----------------|
| • UofT Fellowship
University of Toronto | (2004-2005) |
| • International Student Scholarship
Portland State University | (2002-2003) |
| • Undergraduate Research and Creative Activity Award
Portland State University | (January 2003) |
| • Columbia Slough Watershed Achievement Award
Columbia Slough Watershed Council, Portland, OR | (November 2003) |
| • GIS in Action 2003 Poster Session
"Best Student Entry" - GIS in Action Conference, Portland, OR | (April 2003) |

SELECTED PUBLICATIONS / PROFESSIONAL MEETINGS

- "Determining Land-Use Information from Land Cover through an Object-Oriented Classification of IKONOS Imagery." M. Lackner and T. M. Conway. *Canadian Journal of Remote Sensing*. Volume 34, Number 2. April 2008.
- "Use of Ancillary Data in an Object-Oriented Classification of Urban Land Cover." Annual Meeting, *Association of American Geographers*. San Francisco, CA. April 17-21, 2007.
- "Urban Land-Use and Land-Cover Classification through an Object-Oriented Approach." Annual Meeting, *Association of American Geographers*. Chicago, IL. March 7-11, 2006.
- GEOIDE Summer School. University of Laval, Quebec City, QC. May 22-27, 2005. Attended courses: Practical GPS, International Standards Metadata.
- "Sheltering the Metroscape: Assessing the Urban Forest." J. Poracsky and M. Lackner. *Metroscape, Institute of Portland Metropolitan Studies*. Winter 2004, pp. 13-19.
- "Urban Forest Canopy Cover in Portland, Oregon: 1972-2002." J. Poracsky and M. Lackner. Final Project Report, Prepared for *Portland General Electric* and *City of Portland Urban Forestry Commission*. July 2004.
- "2002 Urban Forest Canopy & Land Use in Portland's Hollywood District." GIS in Action 2004. Portland, OR. May 11-13, 2004.
- "Urban Forest Collaboration in Portland, Oregon: 1972-2002." J. Poracsky and M. Lackner. Public Participation GIS Conference, *URISA*. Portland, OR. July 20-22, 2003.