

## **TOBIAS FINKE**

814 E 9<sup>th</sup> St, #12, Tucson AZ 85719  
(520) 396 4355, tobias.finke@gmx.net

### **EDUCATION**

#### **M.A. in Geography**

*to be conferred May 2008*

University of Arizona, Tucson, AZ

- A special emphasis in remote sensing and spatial analysis/GIS
- Thesis title: “Object-Oriented Classification to Map Impervious Surfaces for Hydrologic Modeling”
- Awarded Upper San Pedro Partnership Research Assistantship
- Applying for GIS certificate
- GPA 3.9
- Relevant Courses: RNR573 Spatial Analysis and Modeling, Geog553 Location Analysis, Geog520 Advanced GIS, Geog516A Computer Cartography

#### **Diploma in Geography**

*1998-2006*

University of Leipzig, Germany

- Thesis title: “Creation of a Rule-based Model to Allocate Future Land Use Changes in the Tisza River Basin” – In cooperation with Center of Environmental Research (UFZ), Leipzig, Germany
- Focused on landscape ecology and GIS/Spatial Modeling
- Exchange student, University of Arizona 2002-2003, Honorable Mention on Dean’s List, Ray Klimmek Memorial Scholarship

### **PROFESSIONAL EXPERIENCE**

#### **Hydrologic Technician/Research Assistant**

*September 2006-current*

USDA Agricultural Research Service, Southwest Watershed Research Center, Tucson, AZ

- Developing an object-oriented classification process of impervious areas for hydrologic modeling
- Comparing effects of development and construction on soil properties and infiltration
- Managing the acquisition and selection of satellite imagery and specialized software
- Designing and supervising the research of an undergraduate student in the NASA Space Grant Program
- Conducting a feasibility study regarding the use of remote sensing to determine rural water use

#### **Remote Sensing Intern**

*October-December 2004*

Jena Optronik GmbH, Jena, Germany

- Processed and analyzed a variety of remote sensing data including Landsat ETM+ and Quickbird
- Prepared comprehensive reports for customers

#### **GIS Intern**

*February-March 2004*

Center for Environmental Research (UFZ), Leipzig, Germany

- Prepared and analyzed Digital Elevation Models (DEM) for watershed conservation programs
- Created hydrologic models of surface flow for large scale, transboundary watersheds

### **ADDITIONAL SKILLS**

- Software: ArcGIS/ArcInfo including Spatial Analyst and 3D-Analyst  
Erdas Imagine, ENVI, SELES modeling environment, Feature Analyst, MS Office
- Programming: SELES high level modeling language (see Diploma Thesis), introduction to VBA
- Languages: English and German fluency
- Membership: Association of American Geographers, Arizona Hydrologic Society