YANLEI FENG

Fremont, CA, United States, 94538

1(607) 379-7875 | yanleifeng@lbl.gov

Research Interests:

Spatial simulation modeling on forests and land dynamics change:
- Measuring land use and land cover change using GIS and Remote Sensing
- Exploring links between land dynamics changes and drivers statistically and geographically
- Model land use changes and environmental impacts

Education:

PhD student, Department of Geography**,** University of California, Berkeley Current
Master of City and Regional Planning, Cornell University 2017.06
Bachelor of Environmental Studies, Honors in Geography, University of Waterloo 2015.06
Bachelor of Science, Environmental Science, Nanjing University 2015.06

Research Experience:

Cornell University, Department of City and Regional Planning Ithaca, NY
Master thesis, supervised by Professor Kieran Donaghy, Yi Qi, Yuri Mansury 2015.07-04.2017
Modeling Patterns of Land Use in China using an Integrated Cellular Automaton Model
- Studied and analyzed geophysical and demographical drivers of urbanization in China
- Established corresponding mathematical formulas to apply the non-linear relationship
- Modeled the spatial distribution of urban areas in China using integrated Cellular Automaton Model as an extension in ArcMap

Advanced Methods course project, supervised by Professor Yuri Mansury 2016.01-04.2017
Deforestation Simulation Using Agent-based Models in Paragominas, Brazil
- Generated algorithms and model rules based on previous statistic analysis
- Forecasted land use changes from 2004-2008 using an Agent-based model on Netlogo

Research Assistant, supervised by Professor Jennifer Minner 2016.03-01.2017
Reconnecting Architecture and Geography with the Dimension of Time: 4D GIS for Cultural Landscapes and Historic Districts
- Built 3D models on ArcGIS pro and CityEngine servers and compared their differences
- Web-published multiple landscapes and historic landmarks with time sliders

Strengthening Rural-Urban Linkages to Support Rural Economic Development: The Case of Re-Localized Food Systems 2015.09-05.2017
- Measured spatial correlation between markets and rural producers
- Calculated distance and time spent on the transportation using spatial network analysis

Research Assistant, supervised by Professor Stephan Schmidt 2016.01-2016.5
Spatial data analysis on 10-year period policy evaluation in Tanzania, Africa
- Mapped spatial correlation on Tanzania land parcels based on housing conditions

University of Waterloo   **Waterloo, Canada**
Undergraduate thesis, supervised by Professor Peter Deadman   2014.09-2015.04
Spatial modeling on Deforestation in Paragominas, Brazil
• Analyzed ten possible driving factors of land dynamics change from 2000-2004 spatially
• Conducted statistical regression analysis on factors and generated land suitability maps

Advanced GIS project, supervised by Su-yin Tan   2014.09-2014.12
GIS-based Analysis on Future Development of Tim Hortons in Buffalo by using Web-GIS Visualization
• Collected possible factors influence new locations and completed multi-criteria analysis
• Realized web-GIS visualization to find new profitable location for future franchisees

Field work research, supervised by Professor Ian McKenzie   2014.01-2014.04
Measure Snow Damage on Trees-Closer Look at the Impacts of the 2013 Ice Storm in University of Waterloo Rockwood Conservation Area
• Collected field data to measure snow damage severity on trees of multiple species
• Assessed the overall impact of the ice storm damage on trees of 2013

Presentations:

The Association of Collegiate School of Planning Annual Conference
Modeling the Pattern of Land Use in Chinese Cities using an Integrated Cellular Automaton Model, **Yanlei Feng**, primary and presenting author, Yi Qi   2016.11

The Powers of Greenmarkets: Spatial Analysis and Visualization Methods to Explore Local Food Systems at Multiple Scales, Jennifer Minner, **Yanlei Feng**, Xiao Shi, Geslin George, presenting author

Rural Communities to GrowNYC's Greenmarkets: Spatial Analysis to Understand Urban-rural linkages, Jennifer Minner, Becca Jablonski, **Yanlei Feng**, Xiao Shi   2015.11

Awards:

Cornell University, Portman Family Graduate Student Award	2017.04
Cornell University, GTRS position in AAP department	2015-2016
The New York Upstate Chapter APA Student Project Award	2015.12
University of Waterloo, Chinese Universities Entrance Scholarship	2014.04
Nanjing University, People's Scholarship	2011-2013
Nanjing University, Specialty Scholarship	2011-2012

Work Experience:

Lawrence Berkeley National Laboratory, Earth and Environmental Science   Berkeley, CA
Graduate Student Research Assistant   2017-Present

Cornell University, Department of City and Regional Planning   Ithaca, NY
Graduate Teaching/Research Specialist   2015.08-2017.05