

**EXPERIENCE SUMMARY**

Danielle brings her strong background in hydrology, erosion, field work, and agricultural engineering and specializes in GIS analysis. She has gained additional experience using the SWAT (Soil and Water Assessment Tool).

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**EXPERTISE**

GIS Analysis and Data Management  
SWAT (Soil and Water Assessment Tool)  
Agricultural Watersheds  
Nonpoint Source Modeling  
Hydraulic Analysis  
Erosion Analysis  
Field Monitoring  
Cartography

**REGISTRATION**

Engineer in Training (E.I.T.)  
Wisconsin #1511509-500  
WI Certified Soil Erosion Inspector

**EDUCATION**

B.S. in Biological Systems Engineering, 2008  
University of Wisconsin-Madison

Graduate Certificate in Geographic  
Information Systems (GIS) in progress

**PROFESSIONAL HISTORY**

Montgomery Associates: Resource Solutions  
Staff Engineer, 2008 – Present

**PROFESSIONAL AFFILIATIONS**

Engineers Without Borders, 2004 – Present,  
Treasurer of EWB-MAPC, 2009 – Present

**PUBLICATIONS & AWARDS**

McIntosh (now Lee), Bauza, Gray, 2007. *2004  
Wisconsin Sulfur Dioxide and Nitrogen Oxides  
Emissions Report*, PUBL AM-377 2007.  
Wisconsin Department of Natural Resources.

In Business Magazine's Top 40 Under 40  
for 2009, Recipient of the Harry Clarke  
Scholarship, Vicky Lee Hirsh Endowment  
for Conservation Scholarship, Laurence  
and Anella Dexter Scholarship for  
Academic Excellence

**SELECTED PROJECT EXPERIENCE**

**Yahara CLEAN Non-Point Source Modeling, Dane County, WI**

- Developed land use, manure modeling strategies, and SWAT model inputs through ArcGIS. Built preliminary SWAT model for sediment and phosphorus reaching the Yahara Lakes Watershed.
- Created a 12 map series to demonstrate how the SWAT model was built and to evaluate future land use scenarios and potential changes in sediment and phosphorus in the watershed.

**Surface Water Analysis, Spring Green, WI**

- Conducted well monitoring and analyzed results.
- Investigated stage and flow in the Wisconsin River in relation to water levels in monitoring wells.

**Erosion Control Plan, Alliant Energy and ATC Utility Projects, Multiple Locations**

- Prepared multiple erosion control plans for projects throughout Wisconsin meeting both state and local criteria.
- Used ArcGIS to map project route and identify potential areas where resources could be impacted.

**Engineers Without Borders Rwanda Agricultural Assessment Team**

- Assisted in development of a soil assessment in Muramba, Rwanda for potential for improvements.
- Travelled to Muramba to conduct assessment in January 2009. After sampling and analyzing soil, a general lack of nitrogen and a low pH in was typical in agricultural soils. The team set up an experimental test plot in conjunction with the Rwandan agricultural university to demonstrate best management practices over three years.

**The Hoopla Rack, University of Wisconsin-Madison**

- Researched and developed a rack to transport 6 hula hoops on a bicycle and constructed a working prototype.
- Winner of the Schoof's Prize for Creativity (3<sup>rd</sup> Place), Tong Prototype Prize (3<sup>rd</sup> Place), and Best Presentation, totaling \$5,700.

**SOFTWARE USED**

ArcGIS with Spatial and 3-D Analyst Extensions, AutoCAD, ArcSWAT, SWAT Editor, HEC-RAS, HEC-GeoRAS, Microsoft Office, Dreamweaver, Adobe Photoshop and Illustrator

**FIELD EXPERIENCE**

Well level monitoring  
Water quality and streamflow monitoring  
Soil sampling and testing

**DANIELLE LEE, E.I.T.**  
WATER RESOURCES ENGINEER

