Internships at MTRI

Our Mission:
Provide a real world experience for high school, undergraduate, and graduate students in a research institute that addresses advanced technology to sense and understand natural and man-made environments.

Preparing Today’s Students for the Future
• Tasks are varied and include field data collection, image processing, programming, data analysis, contributing to reports, and presenting results to colleagues.
• Opportunities to learn more about various scientific and technical disciplines, and to work with MTRI sponsors such as EPA, GLOS, NIH, USGS, USFWS, NASA, US BLM, USDOT, MDOT, and DoD.
• Interns are compensated with an hourly wage based on schooling and other experience.
• 41 Michigan Tech students have completed summer internships at MTRI and area university and high-school students also participate.
• Internships include opportunities to learn about using your talents in a team environment, working on a project with experienced scientists on real-world problems, and experience in presenting your accomplishments during the internship.

Internship Qualifications and Requirements
• Experience with major remote sensing and GIS software, such as ERDAS Imagine, ENVI, Trimble eCognition, and ESRI ArcGIS is preferred.
• Familiarity with spatial concepts, including the workflow of preparing and analyzing remotely sensed imagery, is preferred.
• Skills with editing publications, preparing reports, and cartographic production are preferred.
• Experience with web page editing is preferred.
• Currently pursuing or recently received a Bachelor’s degree, with preference to those in environmental/earth science, electrical or environmental engineering, or computer science.
• Comfortable working within a Windows PC environment and be familiar with MS Office (Word, Excel, Access, and PowerPoint). Linux experience is helpful.
• Experience with programming (such as C#, Python, MATLAB) would be helpful.
• Familiarity with statistical analysis software (R, SPSS, JMP) is helpful.

Eligibility
• Be a student in good standing at an accredited college or university.
• Be majoring in a field appropriate to the job opening.
• Have a minimum grade point average of 3.0 on a 4.0 scale, or equivalent.
• Be a U.S. citizen.

2014 Participants
• A total of 26 Internships.
• Represented Universities: Michigan Technological University (7), University of Michigan, University of Michigan (Dearborn), Central Michigan University, Michigan State University, Middlebury College, Southern Illinois University, Utah State University, University of Maryland, and Texas Tech University.
• High School Students: 1

Michigan Tech Student Interns at MTRI
2011: Elizabeth Banda, Jack Kelly (Full Time Staff), Ron Kemker, Anthony Landon, Nathan Miller, Alex Nesteruk, Nathan Warner, James Whitehead, Angela Yu; 2012: Elizabeth Banda, Justin Carter, Jenny Heise, Anthony Landon (Full Time Staff), Nathan Miller, Alex Nesteruk, Kyle Oberle, Zach Tanghetti-Abrams, and James Whitehead.
2013: Elizabeth Banda (recently hired as full time staff), Justin Carter, Clayton Doyle, Amy Howes, Dan Hutchison, AJ Smith, and David Valo.
2014: Samuel Aden, Erin Cafferty, Jason Hiebel, Dan Hutchison, David Morehouse, Christopher Rickerd, Blaine Stormer.

(Left) Intern Amy Rohman
(recent graduate from Utah State Univ.) accompanies MTRI scientists to Fairbanks, Alaska to collect slope stability data for the Alyeska Pipeline Company.

(Left) Intern John Behrendt
(student at Univ. of Michigan) assists in calibrating a RADAR for the Vehicle Animal Collision Avoidance project.

(Right) Interns Katrina Subotic, John Behrendt, and Chris Rickerd
(Ph.D. student at Univ. of Maryland) assisting research scientists and engineers during data collections.

(Right) Intern Blaine Stormer
(recent graduate from Michigan Tech) is installing soil moisture dataloggers to monitor seasonal drought on Mason Mountain WMA, Mason, TX.

(Left) Intern Nor Serocki
(recent graduate from Michigan Tech), is identifying submerged vegetation in Saginaw Bay, MI.

(Right) Interns Amy Rohman, Glenn Sullivan, and Kaitlyn Smith
recording installation information from soil moisture dataloggers to help drought management systems in the lower Colorado River Basin in Texas.

(Left) Interns Glenn Sullivan
(student at Univ. of Michigan) assisting engineers in creating an app that allows MDOT bridge inspectors to enter data for 3D bridge modeling.

(Right) Intern Kaitlyn Smith
(recent graduate from Texas Tech University) identifying wetland type in Georgian Bay, Ontario.

(Right) Intern Amy Rohman
is setting up LiDAR and photogrammetry targets in Houghton, MI, for the Sustainable Geotechnical Asset Management (U.S. DOT) project that is measuring ground movement.