



Landry selected as NURail Student of the Year and other RTP students in Rail Conferences

Steven Landry, PhD student in Applied Cognitive Science and Human Factors, was selected as one of the NURail students of the year. After receiving his award during TRB Annual Meeting in Washington, D.C., he presented the results of his research on *In-Vehicle Auditory Warning Systems* to the TRB Rail Crossing Committee (AHB60). On other conference news, Pasi and two students (Aaron Dean and Soumith Oduru) traveled to Philadelphia in early April to present papers in the 2017 Joint Rail Conference. Soumith presented "*Incorporating Life Cycle Assessment in Freight Transportation Infrastructure Project Evaluation*"; Aaron presented "*Effectiveness of Using SHRP2 Naturalistic Driving Study Data to Analyze Driver Behavior at Highway-rail Grade Crossings*" and "*Selection of Representative Crossings Database for the Evaluation of Driver Behavior Over Highway-rail Grade Crossings*". Pasi presented "*Sensor Fusion of Wayside Visible and Thermal Imagery for Rail Car Wheel and Bearing Damage Detection*" on behalf of Hanieh Deilamsalehy.

Student Project Spotlight—Sawyer International Airport Transportation Improvements

Fourteen students from the Civil and Environmental Engineering Department worked with Steve Schenden, Sawyer International Airport Director of Operations, and Eric Anderson, Manager of Planning, Community Development, Forestry & Recreation for Marquette County to develop conceptual plans for rail and highway service to the airport. One group tackled unit train rail service for a proposed refinery operation south of the airport, while another group worked on rail and highway access to a proposed trans-load and warehouse complex west of the runway. The project provided students with experience working on a real-world project. Airport and County representatives will use the student work as a base for discussions with prospective airport tenants.



Students trudge through snow at SIA field trip

K-12 Outreach

RTP and REAC continued to support K-12 outreach projects. On Feb 20 David Nelson, Aaron Dean, Modeste Muhire and Smruti Dash conducted a rail activity in support of the Transportation Engineering After School program for students in Grades 1 and 2. Fourteen students had a blast learning a little about trains and playing with our Brio rail and maglev train sets!



Students at Transportation Engineering After School Program

UPCOMING EVENTS

[Rail and Intermodal Transportation Summer Youth Program](#)

– Jul 9-14, 2017

The 8th annual program will be again hosted by Michigan Tech and University of Wisconsin – Superior

[Midwest Rail Conference](#)

– Aug 15-17, 2017

The 2017 Midwest Rail Conference "Midwest Connections: Passenger and Freight Rail Look to the Future" will be held August 15-17, 2017 in Kalamazoo, MI.

[AREMA and Railway Interchange 2017](#)

– Sep 17-20, 2017

AREMA 2017 and the Railway Interchange are back in Indianapolis this year.

[4th Annual Rail Day and Railroad Night XIII](#)

– Oct 3-4, 2017

Annual student/industry event at Michigan Tech in Houghton

NURail Projects completed

Since 2012, the National University Rail Center (NURail) has been a core component of RTP's research portfolio. The spring saw completion of several projects funded by the NURail, together with various co-sponsors. Some of the projects included:

- *Rail Embankment Stabilization Needs on the Hudson Bay Railway* by Thomas Oomen, Priscilla Addison and Pasi Lautala (co-sponsored by Omnitrax)
- Austempered Ductile Iron (ADI) For Railroad Wheels by Karl Warsinski and Paul Sanders
- *National University Rail Transportation Center (NURail) Tier 1 – Final Report* by Pasi Lautala and David Nelson (included several projects co-sponsored by Michigan Department of Transportation)

RTP & AREMA Scholarships

Congratulations to our scholarship winners! Derek Owen and Haylee Lakenen grabbed the local CN Railroad Scholarships offered through RTP. Aaron Dean, Alex Lakenen, and Alyssa Leach each earned an AREMA Michigan Tech Alumni Scholarship. Derek also received an AREMA Committee 24 – Education and Training Scholarship, and Modeste Muhire got an AREMA Committee 12 – Rail Transit Scholarship. You can get more details at our [website](#), and again, congratulations to all of our winners!!



RTP Student Scholarship Winners

RTP Students Awarded Fellowships

Two of our REAC students won prestigious awards on campus this spring! Darian Reed was selected for a Summer Undergraduate Research Fellowship (SURF) with his proposal to compare head-tracking data from the Naturalistic Driving Study with similar work in the driving simulator housed in the Dept of Cognitive and Learning Sciences. Aaron Dean was selected to continue work started in last year's SURF with a new award through the Undergraduate Research Internship Program (URIP). Both students work will aid with our research project looking at driver behavior at highway-rail grade crossings, using the data from the SHRP2 Naturalistic Driving Study. Congratulations Aaron and Darian!

REAC Spring Field Trip

Fourteen REAC members traveled to Janesville & Madison, WI to tour WSOR Facilities. Students received an in-depth look at their locomotive facility, recent track rehabilitation projects, as well as bridge and industry projects across the railroad. The students also joined the UW-Madison AREMA chapter for a joint cookout and social gathering.



IN THE NEWS

- Michigan Tech's Rail Transportation Program is covered extensively in the Railway engineering education article by [Railway Track and Structures](#). November 2016, pg 26

ON THE ROAD

- 1/17–12, 2017 Pasi Lautala and Steven Landry at 96th TRB Annual Meeting, Washington, DC
- 1/27, 2017 Dave Nelson and 14 senior CEE majors at Sawyer International Airport for senior design field trip
- 2/9-10, 2017 Dave Nelson and Aaron Dean at Virginia Tech Transportation Institute to coordinate NDS data acquisition
- 2/23-25, 2017 Dave Nelson at AREMA Committee 24 meeting in Jacksonville, FL. Roles in PGRE rewrite and REES 2016
- 3/29, 2017 Pasi Lautala at Commission for Logistics and Supply Chain Collaboration meeting, Lansing, MI
- 3/31-4/2, 2017 REAC Spring Field Trip to Janesville and Madison, hosted by Wisconsin Southern Railroad
- 4/4-7, 2017 Pasi Lautala, Aaron Dean, and Soumith Oduru at Joint Rail Conference in Philadelphia, PA
- 4/20-21, 2017 Sangpil Ko presented poster at the TRF Annual Forum in Chicago, IL

VISITORS TO TECH

- 2/6, 2017 Henry Posner from the Railway Development Corporation presented to the OSM 4700 course
- 3/14, 2017 Dan Schulte (Quandel) and Ryan Hoensheid (MDOT) presented *Re-Engineering the MDOT Michigan Line* to REAC
- 4/5, 2017 Joe Petrocik from Eagle Mine talked with the OSM 4700 class Eagle Mine transportation logistics
- 4/11, 2017 Erik Czarnik from CN discussed with REAC his work with CN since graduating from Tech 4/12/2017
- 4/12, 2017 Ken Filpus from MDOT on campus to talk about MDOT projects with CE 4407



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