



# SUMMARY OF 2016 UB NATIONAL SUMMER TRANSPORTATION INSTITUTE

July 11 – 15, 2016

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# Closing Remarks



**Liesl Folks**

Dean, School of Engineering and Applied  
Sciences, UB

# Lottery for Board Games

Dean will randomly pick **four** names from the box and these students will receive our railway board game.



# Summary of NSTI Program Curriculum

1 University Tour	Earthquake lab, Driving simulator lab, etc.
10 Lectures (1 hr each)	Career Opportunities in Transportation
	Highway Transportation
	Freight Transportation
	Social Media and Transportation
	Wind Engineering and Hazard
	Driving Simulator
	Navigation System
	Construction and Transportation Infrastructure
	Basswood Bridge Design
	Transportation Practice in NY State
4 Projects (3-5 hr each)	Traffic Data Collection and Signal Optimization
	Railway Network Design Game
	Basswood Bridge Design
	Bridge Design with Software
3 Field trips (3-4 hr each), 5 hosts	The Railroad Museum
	Traffic operation center at Niagara International Transportation Technology Coalition (NITTEC)
	Erie canal cruise at Lockport
	Air Control Tower
	Field Tour of Buffalo Niagara International Airport
3 Enhancement activities (1-3 hr each)	Team Building
	College Preparation and Admission Process
	PowerPoint Presentation Preparation
"Trivial" questions	small questions for daily lectures



# University Campus Tour (Mon)



# Academic: Lectures

- Career Opportunities in Transportation

## Athena Hutchins

Executive Director

Niagara International

Transportation Technology

Coalition (NITTEC)

- Discuss various opportunities within the transportation career, including government, industry and academia.
- How to become an engineer
- What is Professional Engineer (PE)



# Academic

- Introduction to Freight Transportation

**Qian Wang**

Assistant Professor

Civil, Structural and Environmental Engineering, UB



- Understand the existing freight transportation system.
- Learn how to analyze freight cost in NYC



University at Buffalo

The State University of New York

# Academic: Lectures

- Transportation Practice in NY State

**Susan Surdej**

Assistant to the Regional Director  
Regional Public Information Officer  
NYS Department of Transportation -  
Region 5

- Introduce mission, current transportation practice and future development of NYS Department of Transportation
- Lots of project pictures in incident management, winter operations, etc.





# Academic

- Driving Simulator (Thu)

**Kevin Hulme**

Senior Research Associate

Shared Instrumentation Laboratories



# Academic: Project

- Project: Basswood Bridge Build

**Yu Cui and Kevin Westermann**

Civil, Structural and  
Environmental Engineering, and  
Industrial and Systems  
Engineering, UB

- Build your own bridge with paper, basswood, scissors and glue.
- It took three days to finish the project. Mon- design and build, Tue-Wed- build, Friday- Test



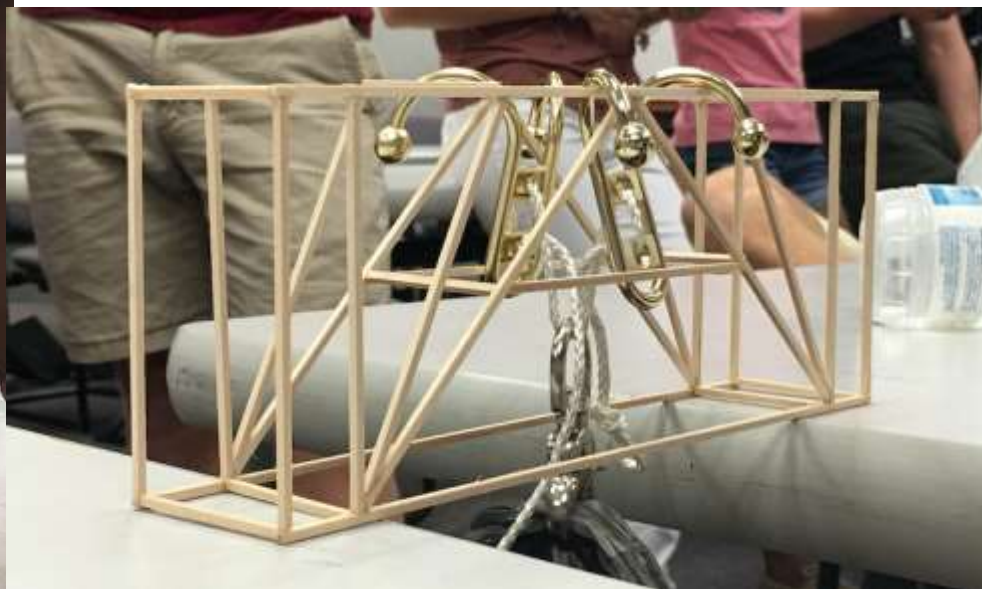
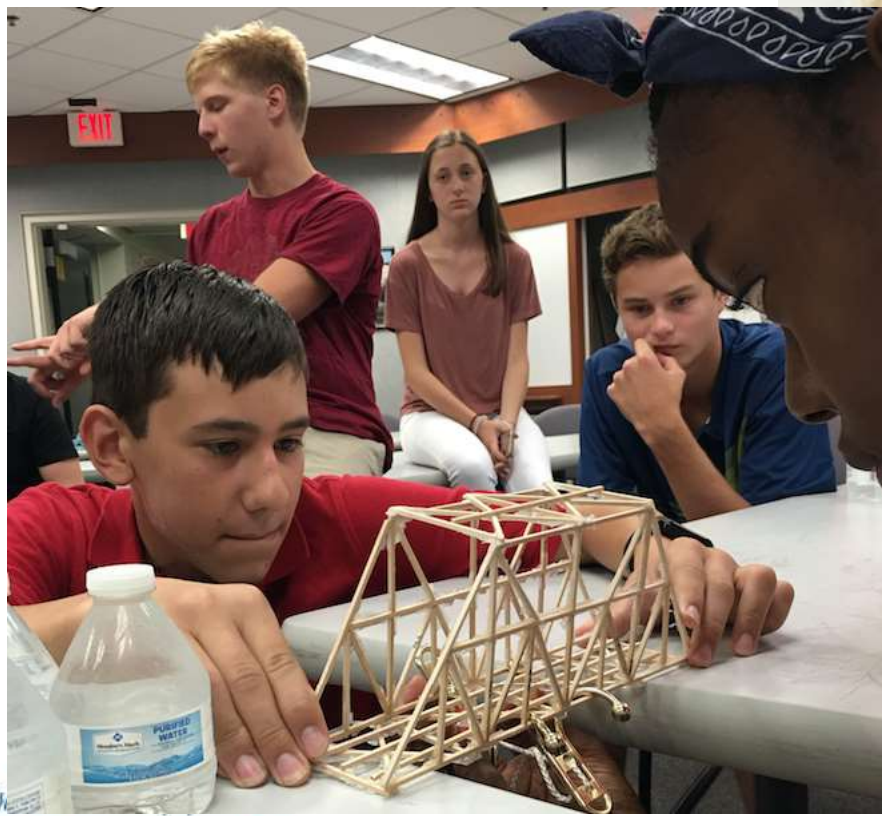
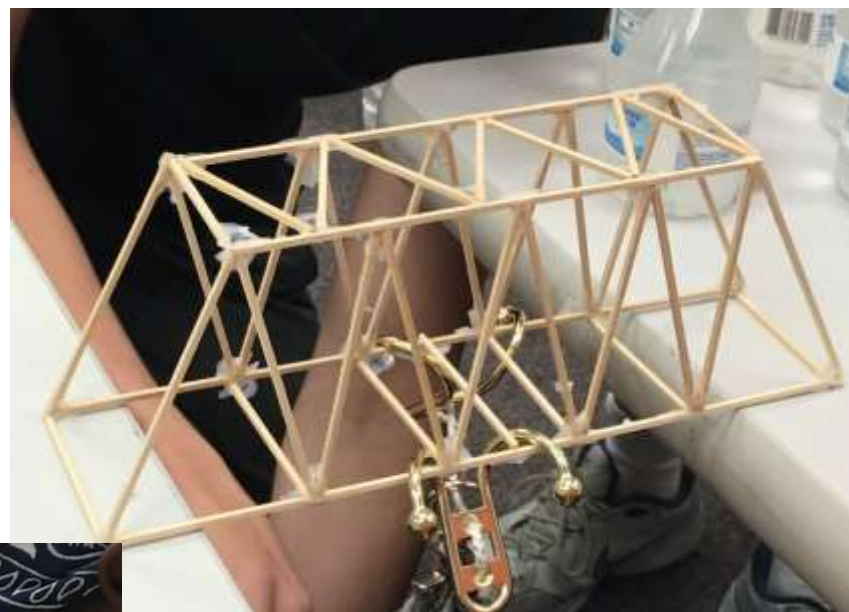


# Basswood Bridge Build – Day 2 and Day 3



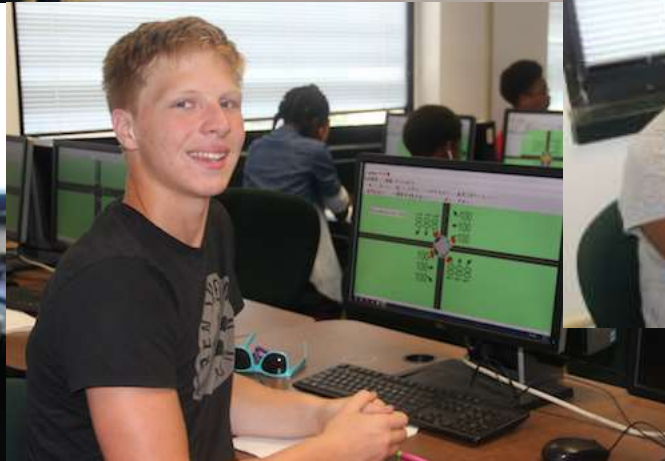


# Basswood Bridge Test – Day 5



# Academic Projects

- Highway Transportation (Tue)
  - project: Traffic Simulation and Signal Optimization





# Academic: Lectures and Projects

- Construction and Transportation Infrastructure (Thu)
  - Project: Bridge Design with Least Cost



# Academic Project

- Navigation Systems (Thu)
  - project: Railway Network Design Game





# Field Trips

- Trip 1: Land transportation (Tue):
  - 1.1 The Railroad Museum



# Field Trips

- Trip 1: Land transportation (Tue):
  - 1.2. Traffic operation center at Niagara International Transportation Technology Coalition (NITTEC)





# Field Trips

- Trip 3: Air transportation (Wed)
  - Air Control Tower





# Field Trips

- Trip 3: Air transportation (Wed)
  - Buffalo Niagara Airport Tour



# Field Trips

- Trip 2: Water transportation (Thu):
  - Erie canal at Lockport
  - “Locking through” and being raised the 49 ft. elevation





# Enhancement

- Team Building (Fri)



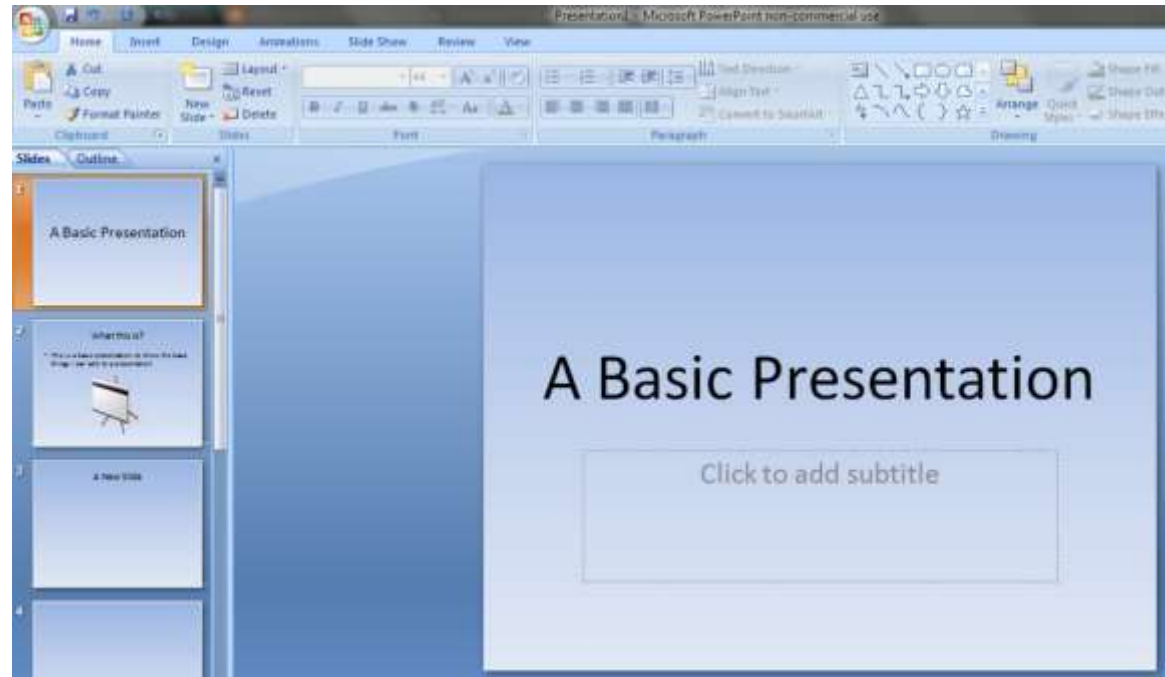
# Enhancement

- College Preparation and Admission Process (Fri)



# Enhancement

- PowerPoint Presentation Preparation (Fri)





# Daily “Trivial” Questions



# Student Presentation

Order	First_name	Surname
1	Alex	Hartman
2	Andrew	Lin
3	Andrew(AJ)	Spero
4	Clayton	Karam
5	De'Amari(Dee dee)	Sanford
6	Edward (Eddie)	Tocco
7	Grant	GianGrasso
8	James	Moore II
9	Jay	Robertson
10	Jeevi	Scarozza
11	Jeffrey	Schalberg
12	Jonathan	Fomenko
13	Josh-Lynne	Jenifer
14	Kevin	Roche

15	Lauryn	Whiteside
16	Malachi	Gates
17	Matthew	Sokolowski
18	Matthew (Matt)	Roche
19	Max	Wozniak
20	Michael (Mike)	Keane
21	Molly	Gillen
22	Nia	McFoy
23	Renaud	Tessier
24	Ricardo	Gomez
25	Riley	McLaughlin
26	Salvatore (Sam)	Sanflippo
27	Sasha	Chandler



# Group Competition in NSTI

- Four projects
  - Basswood Bridge design (20 points)
  - Traffic simulation and design (10 points)
  - Railway network game (10 points)
  - Westpoint Bridge competition (10 points)
- Trivial questions (10 points)
- Total 60 points



# The Winner Team is ...

- Group 1

Kevin	Roche
Edward (Eddie)*	Tocco
Jay	Robertson
Ricardo	Gomez
Renaud	Tessier
Lauryn	Whiteside
Matthew	Sokolowski



# Thanks to Our Staff: Kevin, Yu and Sky!





# Hasta Luego!

Need your help for a future survey.

