

CyberTruck Challenge 2019

Presentation to the NMFTA; November 2018

Karl Heimer

karl.heimer@outlook.com

+1.248.270.0117



Mission & Purpose

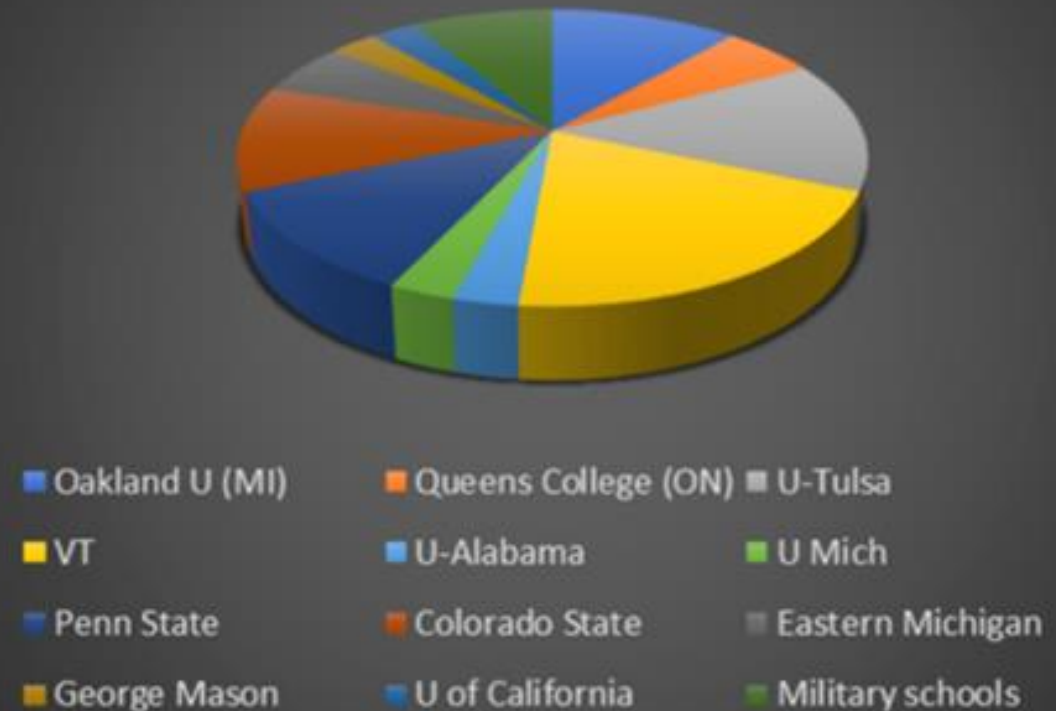
- Help **develop the next generation workforce** by bringing awareness, excitement, professional involvement, and practicum based training to the heavy vehicle cyber domain.
- Help **establish community of interest for heavy vehicle cyber** that transcends individual companies or departments and reaches across disciplines and organizations to make a more universal and experienced base of engineers and managers.



Details

- Annual event held in June
- Location: Macomb CC Sports & Expo Center
- Students: graduate and undergraduate
- Teams: students, industry engineers, supplier engineers, government engineers, hackers
- Format: practicum

Participating Universities



100% Increase in
universities attending

Sponsors

300% Increase in
sponsored trucks

80% Increase in
security
companies



A special thank you
to our sponsors



Premier Sponsor

**MICHIGAN
DEFENSE CENTER**

MICHIGAN ECONOMIC
DEVELOPMENT CORPORATION



Platinum Sponsor



Gold Sponsor

PACCAR

GEOTAB
management by measurement



Silver Sponsor



for supporting the 2nd Annual
CyberTruck Challenge, June 11-15 2018.

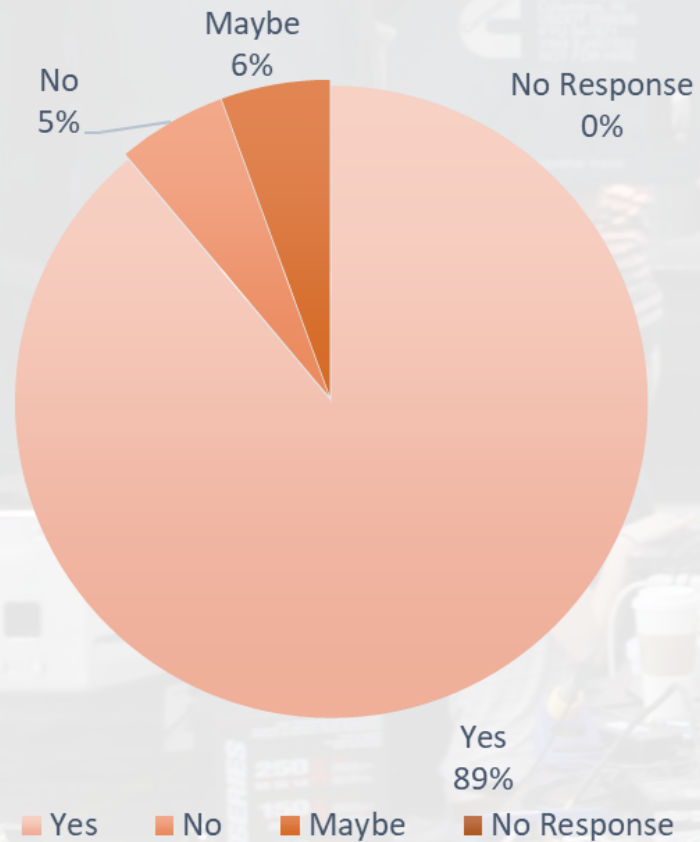
100% Increase in
suppliers

Schedule & Curriculum

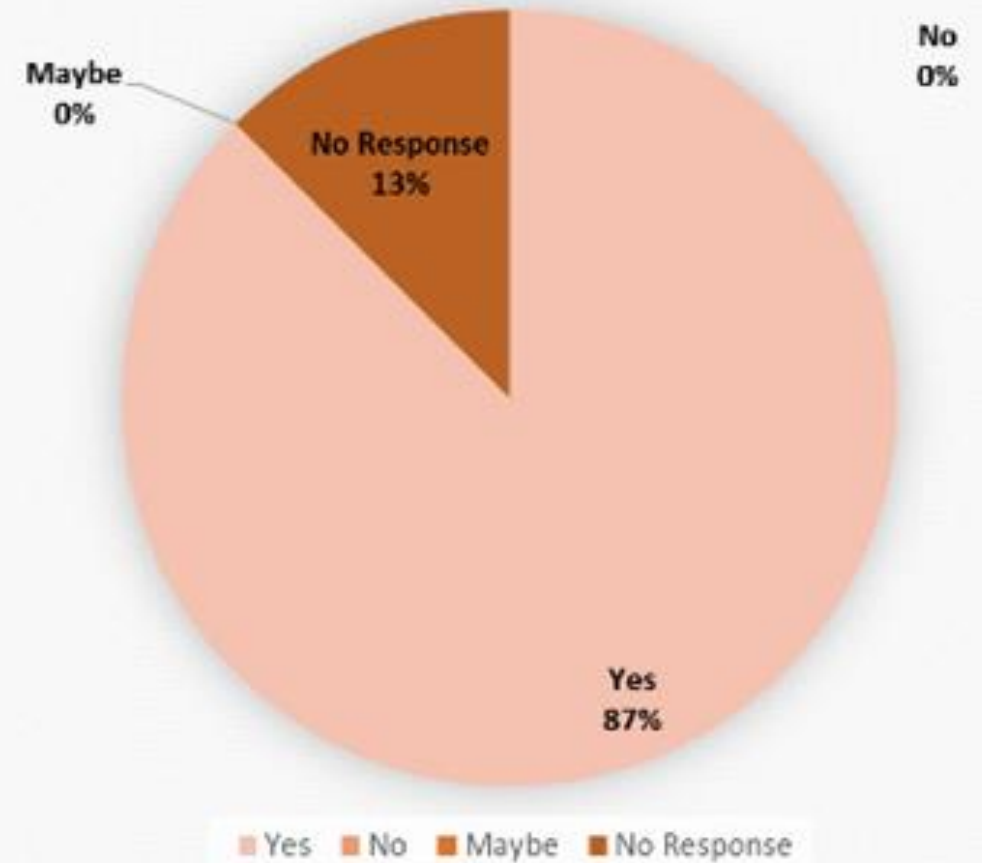
Time	Sunday, 10 June	Monday, 11 June	Tuesday, 12 June	Wednesday, 13 June	Thursday, 14 June	Friday, 15 June
Before 0700	Site Closed	Site Closed	Site Closed	Site Closed	Site Closed	Site Closed
0700-0800		Free	Free	Free	Free	Free
0800-0900		Breakfast/Registration	Breakfast	Breakfast	Breakfast	Breakfast
0900-1000		Welcome and NDA	Hardware	Conducting Assessments*	Assessment	Student Team Briefs
1000-1100		Truck Systems		Assessment		Review*
1100-1200		Engines	Lunch	Lunch	Lunch	Lunch
1200-1300		Lunch	Cryptography	Assessment	Assessment	Site Closed
1300-1400		CANBUS				
1400-1500		Side Channel Analysis				
1500-1600						
1600-1700		Dinner	Dinner	Dinner	Dinner	
1700-1800						
1800-1900	Informal Welcome Reception (offsite)	Arsenal Talks	Arsenal Talks	Free	Free	
1900-2000						
2000-2100	Site Closed	Free	Free	Free	Free	
2100-2200						
After 2200	Site Closed	Site Closed	Site Closed	Site Closed	Site Closed	
*Survey				*Survey		

Outcomes

Has attending made you MORE likely to enter this industry?



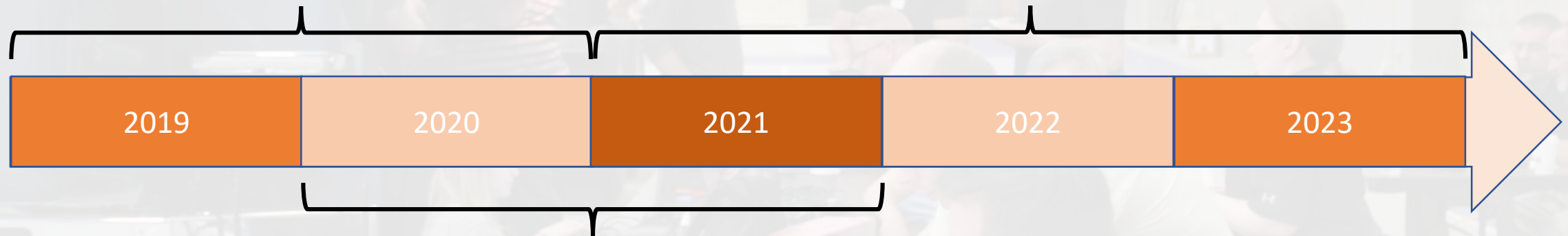
Have you found a mentor?



Plans over next 1-5 years

- 1.) Pre-work and selection
- 2.) College program tie-in
- 3.) CTF component
- 4.) NSF Workshops

- 1.) EV-EVSE attack vectors (electrical vehicle infrastructure)
- 2.) “Smart City” attack vectors
- 3.) Crypto update pending advances in quantum cryptography



- 1.) Metrics Framework
- 2.) Tools and vuln checkers
- 3.) Security product targets

SAVE THE DATE

- CyberTruck Challenge 2019
- Macomb CC Sports & Expo Center
- June 23-28, 2019
- Optional “Detroit Day” during which participants can get some of the “Detroit Experience” – and MEDC outreach activity
- Question? Sponsorship? Mentorship? Sign-up? Email or call
 - jeremy-daily@utulsa.edu
 - karl.heimer@outlook.com

Your Participation

- What additional new topics should we consider?
- Are any of the topics superfluous?
- What kinds of subsystems are most important?
- What sorts of services (hiring contacts, etc.) would be helpful?
- What additional universities should we contact?
- What do you need to see or hear for your organization to sponsor and/or participate?
- What else?

Thank you

Presentation to the NMFTA; November 2018

Karl Heimer

karl.heimer@outlook.com

+1.248.270.0117

