



MY JOURNEY

- I Joined UI as applied thermodynamics faculty member in Fall 1987**
=> formation of a content expert and academic researcher
- I Taught Engineering Science, Freshman/Sophomore Design in 1990's**
=> formation as a facilitator for learning to learn
- I Capstone Design instructor, 1996-present**
=> formation as a facilitator of project learning and performance development
- I Immersion in 2nd Discipline of the Scholarship of Teaching/Learning**
=> Co-Director of Faculty Guidebook Project 2001-2007
=> Co-PI of NSF Enriched Learning Environment Project 2003-2007
=> Co-PI in NSF TIDEE and IDEALS Consortia 2000-2013
- I ME Department Chair, 2015-present**
=> advocate for learning infrastructure, community building, and mentoring



COMBUSTION RESEARCH ACTIVITY

- I Catalytic igniter design and compression ignition modeling
- I Honda Genset Performance w/catalytic igniters & JP-8
- I Van Performance w/catalytic igniters & aquanol
- I CFR Engine Platform Customization for catalytic igniter testing
- I Driving Cycle Emissions Prediction w/2000-2004 DOE Future Truck
- I Electric Vehicle Energy Management w/2013-2016 FHSAE
- I YZ250 Engine Performance & Emissions Modeling
- I Engine, Vehicle, & Shift Optimization for Simulated European Motocross
- I Fuel Ignition Tester Heat Release & Speciation Measurements
- I Prediction of Intermediate Species in Low Temperature Combustion



MY WAY OF BEING

As a process-oriented educator/scholar...

I want to see growth myself and in others

I trust and respect students (also faculty/staff/administrators)

I enjoy assessment and I embrace feedback

I can handle and adapt to change

I am willing to take risks (esp to advance performance capability)

I use self-assessment to continually improve (esp with the SII model)

I enjoy working with others strive to use time efficiently/effectively

I am willing to shift control to students/others to maximize their growth