



## What I Wish I Knew: Systems Engineering & Project Management

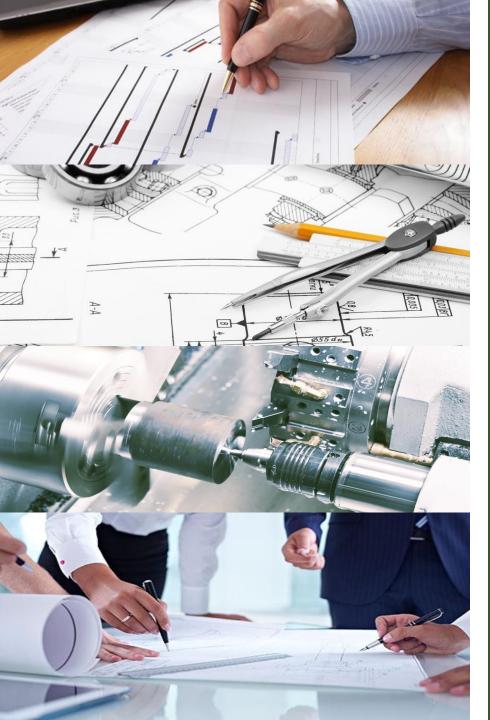
Melissa Onishi
Department of Mechanical Engineering
University of Hawai'i at Manoa
19 September 2018



do u ever just get so annoyed at someone that u literally cannot do anything but make this face to them









# WHAT DO YOU DEFINE AS SUCCESS?



### ESSENTIALS OF LEADERSHIP

Project Manager
Systems Integrator
Finance Officer
Subsystem Leads

#### Three C's to Successful Leadership



1. COMMUNICATION

2. CONSISTENCY

3. CLARITY



#### **Understanding Your Teammates**





Don't assume everyone operates the SAME way YOU do.

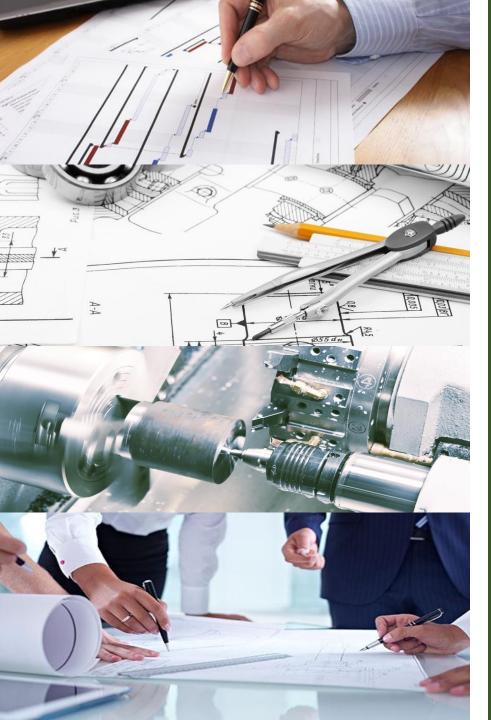




Delegate tasks that are based on your teammates' strengths and weaknesses.



Pay attention to how your teammates interact with one another.





# What does it take to make my design functional?

#### What kind of mindset should I have?

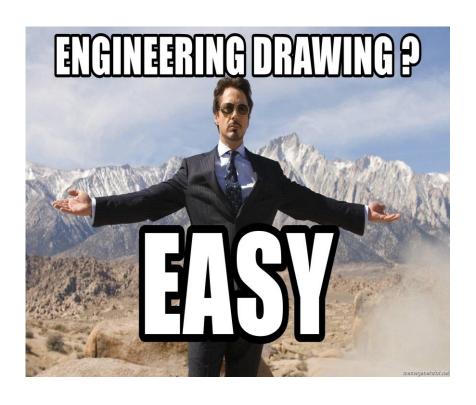


- 1. Be flexible and anticipate.
- 2. Be efficient.

- 3. See the big picture.
- 4. Be prepared for criticism.

#### The Truth About Being Good at 3D CAD





#### Doing actual Engineering Analysis like...



#### **Having Healthy Paranoia**



**Every Time** 



- QUADRUPLE CHECK YOUR DATA INPUT AND OUTPUT!
- Ask yourself does it "make sense?"
- Have multiple pairs of eyes review your work. ☺

#### **Bench Level Testing**



WHEN MY PROTOTYPE DOESN'T WORK



- Start off small, then work your way up.
- Use materials that are readily accessible and affordable.





# MY JOURNEY AS PROJECT MANAGER

Overcoming Team Challenges
Facing my Shortcomings

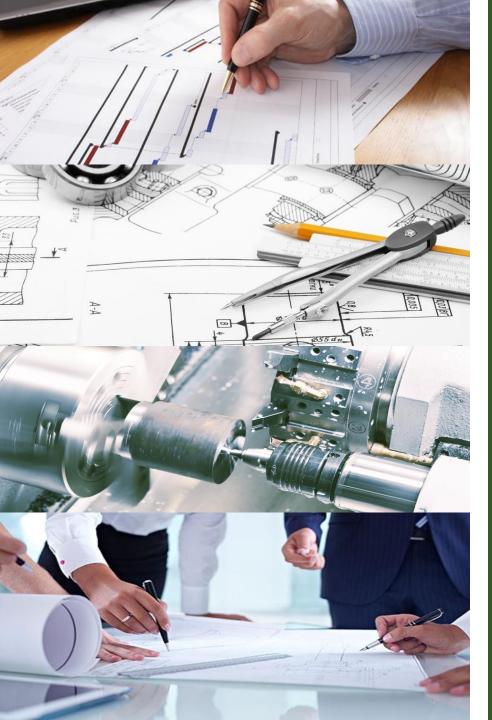
#### **Surviving Senior Design**



1. Get comfortable with being uncomfortable.

2. Choose your battles.

3. Time management is key.





#### QUESTIONS?