

2022 Spring Mechanical Engineering

# Design Celebration

Awards Ceremony | Tuesday, May 24<sup>th</sup>



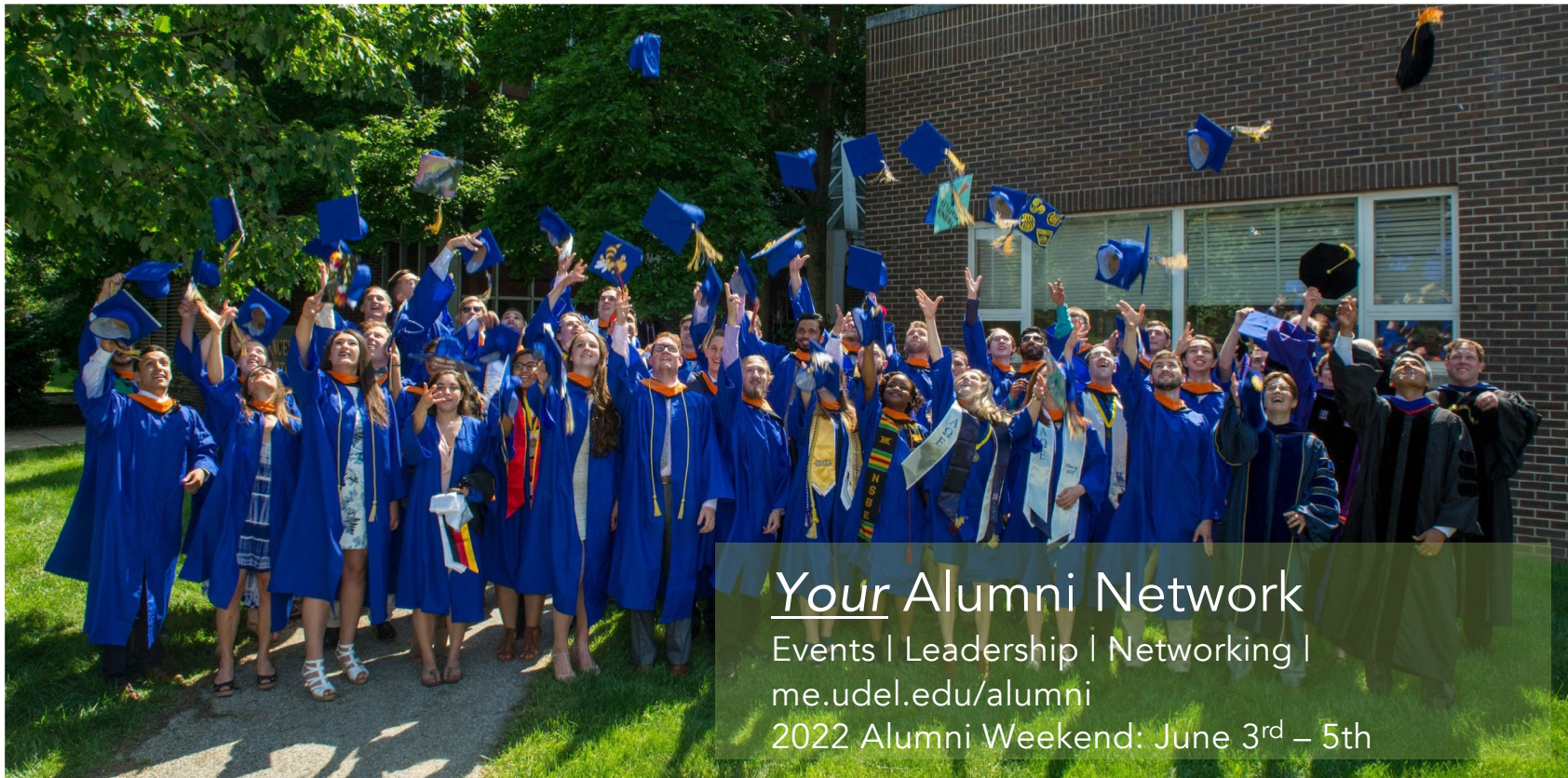
# Welcoming Remarks



Dr. Ajay Prasad  
Professor & Chair, Mechanical Engineering

# Department of Mechanical Engineering

## 2022 Alumni Awards



Your Alumni Network

Events | Leadership | Networking |

[me.udel.edu/alumni](https://me.udel.edu/alumni)

2022 Alumni Weekend: June 3<sup>rd</sup> – 5<sup>th</sup>

Dept. Mechanical Engineering  
Early Career Award



Chengkun Zhang  
UD MechE | PhD 2013

- President, Futronics (NA) Corporation
- Formerly with GE Healthcare, focused on medical devices & robotics
- Silver and Bronze Impact Awards for innovation
- Humanoid Robots, Education Robots, and Service Robots



Dept. Mechanical Engineering

## Distinguished Career Award



Mike Wallace

UD MechE | BME 1991

- CEO & Co-Founder of Devoro Medical & Venture Partner at ShangBay Capital
- Medical device executive and serial entrepreneur
- Inventor or co-inventor of more than 300 patents

Dept. Mechanical Engineering  
Distinguished Career Award

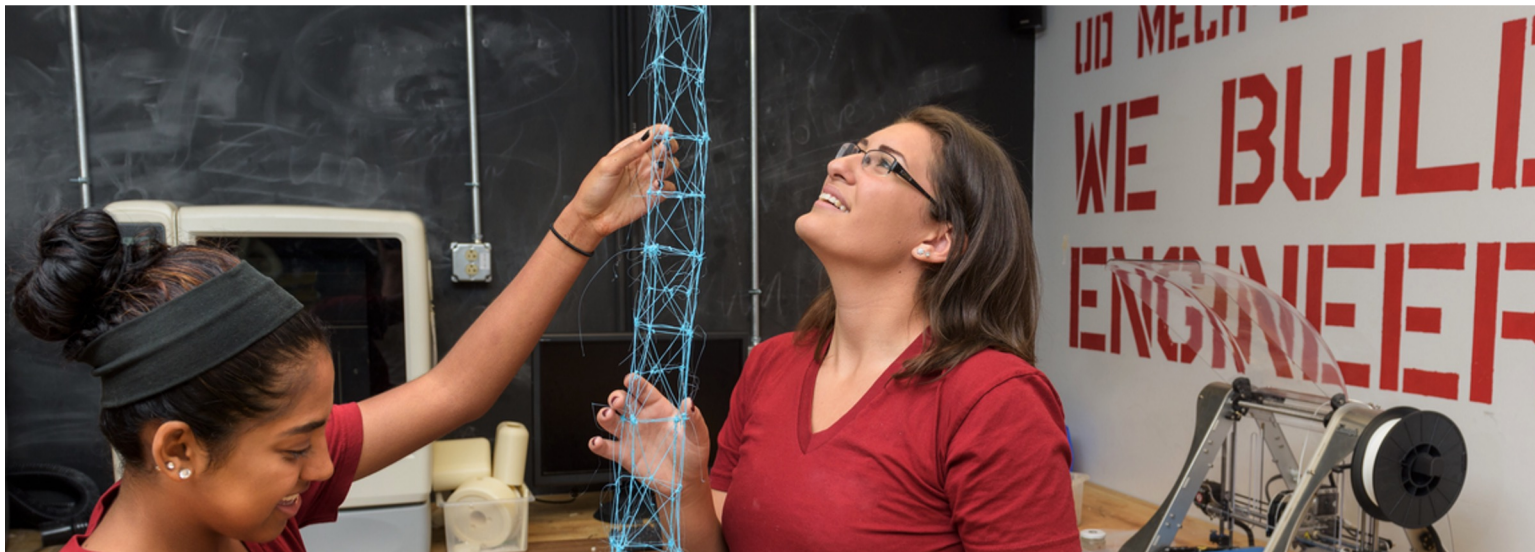


John Gooden

UD MechE | BME 1988

- President & Chief Operating Officer of MDavis & Sons, Inc
- 30+ Years Experience in Contracting & Construction Industry
- Service through Delaware Manufacturing Association, UD Alumni Association, Rotary, & National Guard

Thanks to our support team  
#WeBuildEngineers



- **Design Studio Staff:** Whitney Sample, Scott Nelson, Ron Cantrell, & Steve Beard
- **Academic Advisement:** Allie Andrews
- **Events & Logistics:** Elaine Nelson, Ann Connor, Amy Adams

A (very) big thanks to this guy



Dr. Ajay Prasad

Professor & Chair, Mechanical Engineering

- Chairperson, 2017-Present
- Engineering Alumni Distinguished Professor & Director, Center for Fuel Cell Research
- Fellow of the American Society of Mechanical Engineering
- UD's Excellence in Teaching Award
- Tireless supporter of the UD MechE Program & Its Students



# 2022 Spring Design Showcase



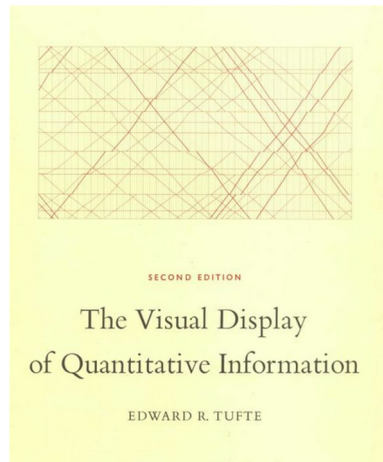
- Technical Communications (MEEG104)
- Freshmen Design (MEEG102)
- Junior Design (MEEG301/304)
- Mechatronics (MEEG467/667)
- Intermediate Heat Transfer (MEEG640)

# Technical Communications

Presented by Prof. Jenni Buckley

## Summative #1 Winners

David Esquivel  
Russell Perdue



## Summative #2 Nominees

Ryan Robison

Kimberly Marks

Connor McCleary

David Tovar

Thomas Bouck

Karen Scharpf

# Pull Toy Individual Design Awards

## Sponsored by Melissa & Doug® | The Semifinalists

Name	Pull Toy	Name	Pull Toy	Name	Pull Toy
Amelia Klinger	Monkeys	Hermelis Reyes	Lion	Nick Bailey - Dog	Dog
Anastasia Cassanelli	Frog	Isabella Kusters	Wizard Frog	Nick Martino	Great Escape
Austin Bainbridge	Fish	James Mou	A Good Boi	Nicole Cacio	Seal
Benjamin Yaroch	Grasshopper	Jason Vera	Snakey	Owen Conway	Capybara
Brendan Fitzpatrick	Bear	Jiro Guillen	Llama	Redwana Tansim	Humpty Dumpty
Cameron Batterberry	Elephant	Josh Edelson	Draco Dragon	Robert Santos	Berto the Seal
Caroline Morey	Turtle	Kaitlin Dohn	Jellyfish	Russell Perdue	Chipmunk
Colton Bowie	Weenie	Kaitlyn Dohn	Jellyfish	Samatha Gerhart	Octopus
Connor Lammey	Globey	Kevin Foerster	Music Mobile	Sean Degaetano	Puffin Pull Toy
David Esquivel	Turtles	Kylie Taylor	Sloth	Thomas Bouck	Pew Pew
Edward O'Donnell	Fishin' Boat	Lauren DeSantis	Ollie the Otter	Thomas Gordon	Turtle
Edwin Torres	Brontosaurus	Logan Butler	Bee	Thomas McAdoo	Red Baron
Ethan Lettieri	Chameleon	Markos Duey	Skate Buddy	Tim Talbot	Sheldon and Son
Gavin Telfer	Lobster	Michael Anderson	Soaring Blue Bird	Turner Brennan	Hammerhead
Grace Wiley	Bee	Miguel Vasquez	Catching Moby	Zion Lee	Willy the Wiggly

# The Best In Show by Melissa & Doug®

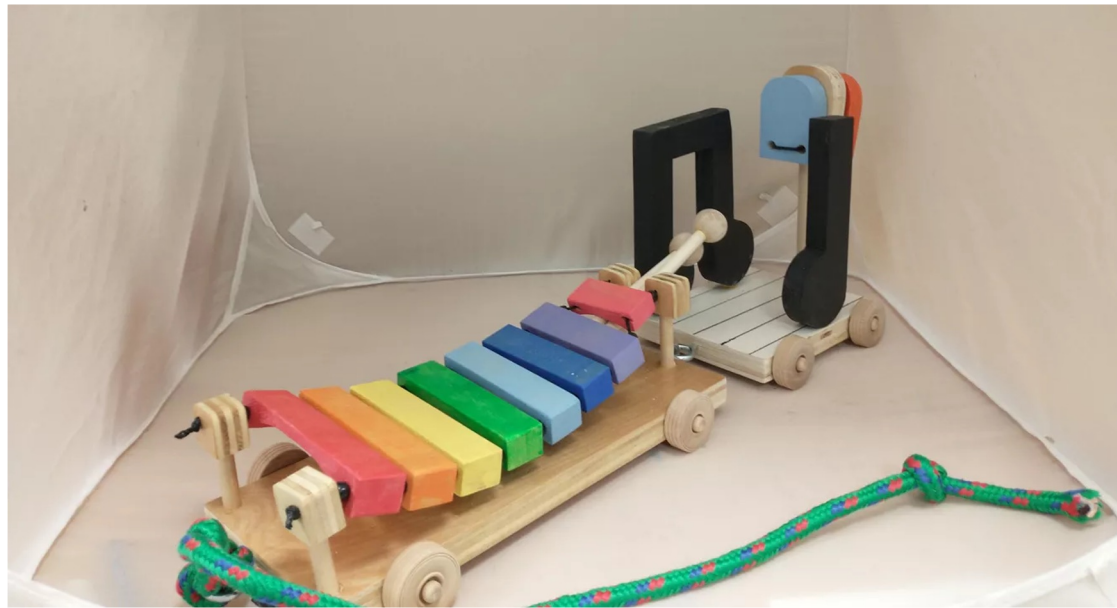
Honorable Mentions      Ollie the Otter by **Lauren DeSantis**

3<sup>rd</sup>      Shelly the Jellyfish by **Kaitlyn Dohn**

2<sup>nd</sup>      Leon the Lion by **Hermelis Reyes**

1<sup>st</sup>      Lama the Llama by **Jiro Guillen**

# Best Overall Design by MechE Dept



Music Making Mobile by **Kevin Forester**



# Rubber Chicken Award

Because You Tried...



Wheelie Winnie by **Colton Bowie**



Pooping Panda by **Matthew Young**

# Team Toy Design Awards

Freshmen Design | MEEG102



# Excellence in Freshmen Design

Evaluated by Instructor Team | Design Process + Prototype + Communication

3<sup>rd</sup>

**Team 112:** The Space Puzzle

Allison Kosikowski, Redwana Tasnim, Sylvia Katz, Benjamin Minner

2<sup>nd</sup>

**Team 101:** The Velcro Puzzle

Team Members: Aisley Bergdoll, Lucas Castle, Marissa Dailey, Connor Lammey, Sarah Nichols

1<sup>st</sup>

**Team 122:** Magnetic Crane

C.Morey, C.Mccleery, G.Wiley, N.Heinlein, I.Kusters

# Early Education Award

Evaluated by HDFS Reviewers | Educational Toy



**Dr. Jen Gallo-Fox**

UD Human Development & Family Studies

## Runners Up

**Team 128:** Modular Vehicle Set

Team Members: Noah Brecht, Kenney Madden,  
Jacob Piretti, Isaac Chandler, Erick Stranko

**Team 127:** Animal Mix & Match

J. Farquhar, A. Ortiz-Cruz, N. Bailey, J. Collins, K. Foerster

## Winner

**Team 134:** OMG Build Your Own Vehicle

Carissa Bonner, Kaitlyn Dohn, Zion Lee, Noah Schoeffler

# Sponsor's Award

Evaluated by Melissa & Doug® | Design Creativity & Prototype



## Runner Up

**Team 133:** YouDee Amusement Park  
Owen Ferrone, Kenneth Deel, Cameron Schmidt

## Winner

**Team 136:** The Rube Register  
Hermelis Reyes, Eddie Torres, Annika Labrador



# People's Choice Award

Chosen by YOU | Virtual Project Gallery + Technical Presentations

3<sup>rd</sup>

**Team 124:** The Rocking Stroller

Shawn Yong, Malika Iyer, David Esquivel, Franklin Alas, Jiro Kuroki

2<sup>nd</sup>

**Team 136:** The Rube Register

Hermelis Reyes, Eddie Torres, Annika Labrador

1<sup>st</sup>

**Team 101:** The Velcro Puzzle

Team Members: Aisley Bergdoll, Lucas Castle, Marissa Dailey, Connor Lammey, Sarah Nichols

Department of Mechanical Engineering

# Junior Design

Year-Long Project | MEEG301 + MEEG304



# Junior Engineering Design: **By the Numbers**

**136** Students

**14** Teams

**2** Industry Partners

**16** Industry Mentors

**1** Really Small Work  
Room



Many thanks to our  
**JUNIOR DESIGN  
MENTORS**

Kevin Cresswell  
Bill Dunfee  
Nick Filzen  
Ed Gargiulo  
Austin Crouse  
Keith Harman  
Justin Rigg

Adam Bitar  
Anthony Dorazio  
Kevin Perdue  
Chris Sockel  
Melody Cerro  
Richard Grist  
Ryan Tocker

# Best Bottle Filling Station

## Team 3

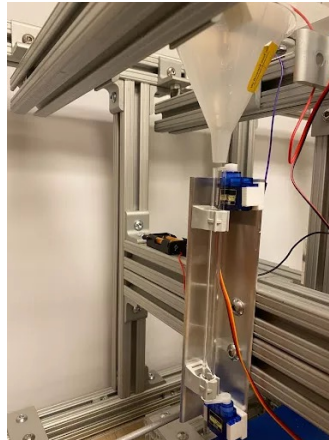
Team Members: Matt Conelli, Joe Gugerty, Jonathan Jimenez, Alex McCall, Lance Adrian Mendoza, Jt Palitto, Jakub Raweki, Ryan McMahon, Matthew Richardson

## Team 9

Team Members: Zach Cantrell, Dylan Jorgensen, Megan Monteleone, Ryan Rudek, Dean Vanegas, Rory van der Steur, Ben Donohue, TJ Kaifer, Avery Recicar, Ethan Watson

## Team 11

Team Members: Daniel Drewnowski, Johnny Lasko, Prathmesh Anant Naik, Raj Shah, Jenny Ziegler, Tyler Cook, Aaron Fieger, Tyler Mehigan, Christina Genario, Alexandra Zurzolo





# Best Bottle Capping Station

## Team 4

Team Members: Aaron Borell, Michael Danski, Gabe Hall, Jarred McIntire, Mike Molesworth, Jacob Permar, Karlens Senatus, Max Ferry, Noah Stiebritz

## Team 5

Team Members: Brandon Burrows, Ted Ellis, Michael Hall, Aaron Berry, Logan McKinney, Camren Monteverdi, Zoe Smith, Joey Tantillo, Audrey Herzig

## Team 13

Team Members: Patrick Cronin, Caitlin Kazokas, Valerie Moore, Thomas Schaeffer, Carley Williamson, John Bruhns, Luc Dubois, Cade Keeler, Matt Ricciardi, Matthew Wood



# Most Innovative Design

## Team 7

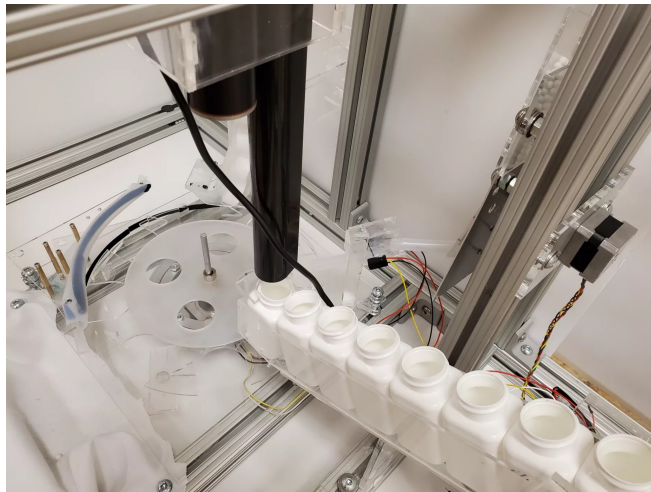
Team Members: Chris Bond, Mickayla Harris, Evan McCleary, Nikki Pilla, Nick Ulizio, Andrew Brillante, Brooke Demore, Timmy Hough, Caylin Payne, Holly Tobon

## Team 8

Team Members: Daniel Borsykowsky, Lorrha Hitchner, Cassidy McCormick, Sam Rauch, Andrew Brown, Owen Brinker, Doug DiDomenico, Jason Kelsch, Miles Pleasanton, Hannah Towhey

## Team 14

Team Members: Sebastian Graper, Rocky Li, John Papadopoulos, Harrison Silverston, Sarah Bartlett, Dominic d'Agostino, David Harkins, Riley O'Connor, Jordan Tatis, Ethan Chappell



# People's Choice Award

## Team 7

Team Members: Chris Bond, Mickayla Harris, Evan McCleary, Nikki Pilla, Nick Ulizio, Andrew Brillante, Brooke Demore, Timmy Hough, Caylin Payne, Holly Tobon

# Best Overall Design

## Team 1

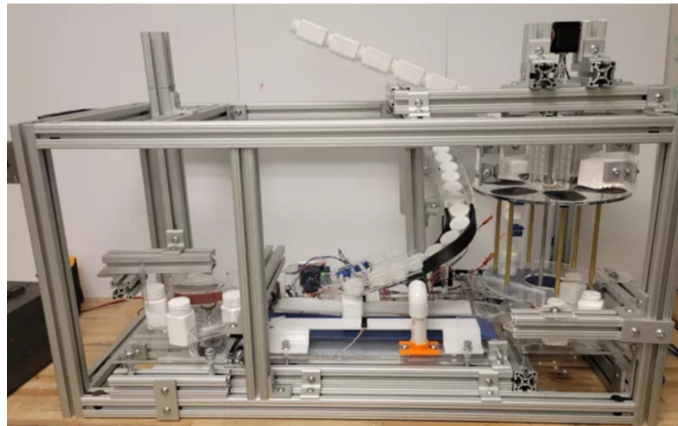
Team Members: Tyler Armele, Jordan Carton, Evan Eng, Ben Hemrick, Ben Kokot, Gavin McMahon, Patrick Mraz, Ryan Polino, Jackson Yeatts, Tim Lamberta

## Team 2

Team Members: Nick Benzi, Brian Fischer, Vea Hernandez, Alaysia Longmire, Claire Cho, Elias Navarro, Victor Riso, Nick Capriotti, Mike Naab

## Team 14

Team Members: Sebastian Graper, Rocky Li, John Papadopoulos, Harrison Silverston, Sarah Bartlett, Dominic d'Agostino, David Harkins, Riley O'Connor, Jordan Tatis, Ethan Chappell



Department of Mechanical Engineering

# Mechatronics

Course Project | MEEG467/667





# Mechatronics "Grid Master" Award

## Team 4

Team Members: Marc de Lecea, Amanda Kelly, Rob Samuelson, Matt Urban

Department of Mechanical Engineering  
**Intermediate Heat Transfer**

Course Project | MEEG640

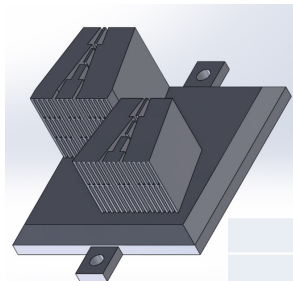


# Best Performance From a Heatsink

Presented by Prof. Feser

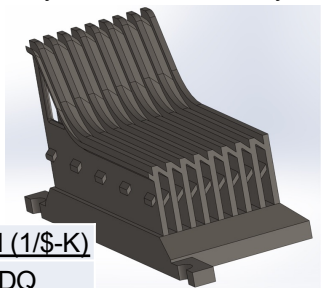
## 1: "Team 3"

Team Members: Jeff Spencer, Kushal Mehta, Jon Kim, Vaishak Vemmanath Natraj



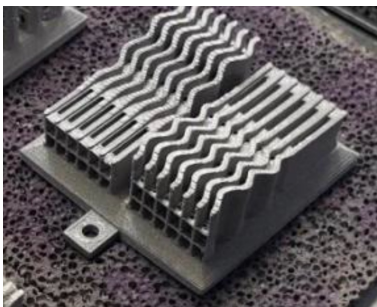
## 2: "Heat Stonk"

Team Members: James Fernyhough, Alex Kramer, Aditya Shreyas, Farida Ahmed Koly



## 3: Asymmetric Wavy H

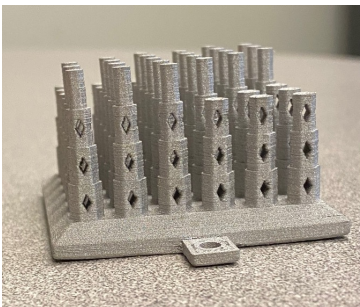
Team Members: Riley Schmi Alnaghmouh, Lukas Fuessel, Kame Gadi



	Tavg (C)	m (g)	FOM (1/\$-K)
Team 3	DQ	135	DQ
Heat Stonk	103.9	180	5.35E-05
Asymmetric Wavy	115.7	163	5.30E-05
Hex Pin Fin	114.9	173	5.03E-05

## Pin Fin

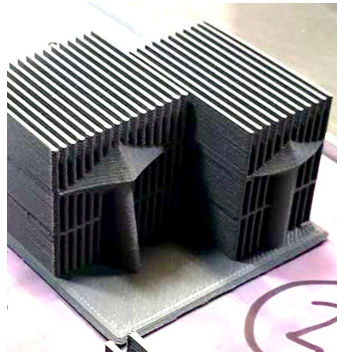
Team Members: Archis Amrite, Sattajit Sarda, Alex Koly, Jazmyne Mitchell



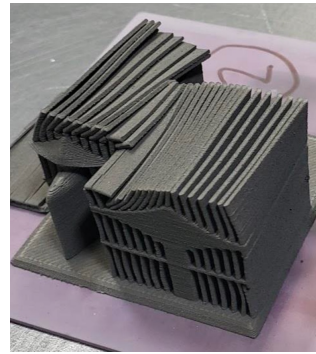
# Best Survival of the Debinding Process

Presented by Prof. Feser

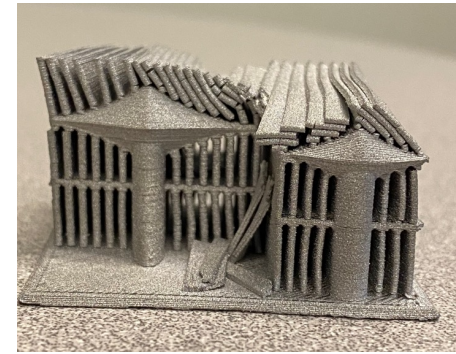
"Green" Part



"Brown" Part

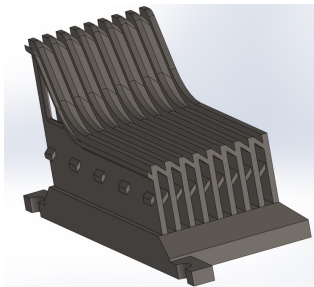


Steel Part



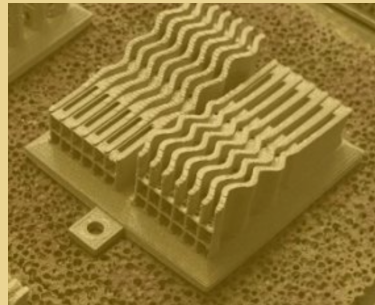
## 2: "Heat Stork"

Team Members: James Fernyhough, Alex Kramer, Aditya Shreyas, Farida Ahmed Koly



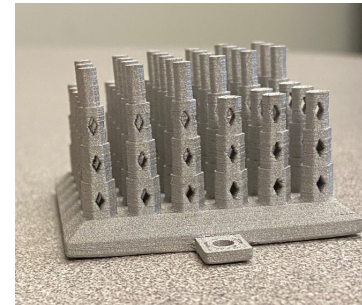
## 3: Asymmetric Wavy Heat Sink

Team Members: Riley Schmitt, Abdulaiziz Alnaghmouh, Lukas Fuessel, Kafle Sulav



## 4: Hexagonal Pin Fin

Team Members: Archis Amrite, Sattajit Barua, Izzy Krynyckyi, Jazmyne Mitchell



# Congrats to all of our students!



You're all winners in our book!

- Technical Communications (MEEG104)
- Freshmen Design (MEEG102)
- Junior Design (MEEG301/304)
- Mechatronics (MEEG467/667)
- Intermediate Heat Transfer (MEEG640)

2022 Spring Mechanical Engineering

# Design Celebration

Congrats & Have a Wonderful Evening!

Unofficial After-Party Location  
(Your Profs will join you around 8-ish)

