

# congratulations class of 2013



IRA A. FULTON SCHOOLS OF  
**engineering**

strongly believe  
you cannot have a  
**great city**  
without a  
**great school of  
engineering.”**

Ira A. Fulton



**ASU** Ira A. Fulton  
Schools of Engineering  
ARIZONA STATE UNIVERSITY  
engineering.asu.edu



"I stand today to once again represent you all—the great Abarikwu family! Thanks for the support you gave and for standing by me from start to finish."

**Onyekachi Chiadikobi A.**

“Thank you, Brynn, for being my motivation; Elizabeth for helping me with everything when times were tough; and Mom, Dad, Jake for always being there!”

**Matthew A.**

“Special thanks to my family for their support!”

**Fawaz A.**

"Mom and Dad, you two have sacrificed so much for my siblings and I. You have no idea how much we appreciate it. Dooset darem."

**Bahar A.**

“Thank you to my beautiful family. I wouldn’t be here without your unconditional love and support.”

**Jessica A.**





"I thank my family for their wonderful support all four years, the ChemE class for joining in the pain, my friends for the smiles, and the faculty!"

**Heba A.**

“Fatimah, Tamim & Aleen:  
thank you. Without you,  
this would not have been  
made possible... Kiss!”

**Salem A.**

“Thank you, Mother, thank you, Father, for supporting and encouraging me all the time. Thank you, God, before everything.”

**Mohammed A.**

"I would like to thank my father, mother, brother, sisters and friends who encouraged, helped and supported me throughout my life as a student."

**Abdulaziz A.**

"Thank you, Dad. Thank you, Mom. Thank you, my brothers. Thank you, my wife. Thank you, my friends. Thank you, ASU."

**Abdulaziz A.**

"To my friends, thanks for the memories. To my family, thank you for always being there! Much luv for the Amoako-Darko clique!"

**Michael A.**

"I'd like to thank my  
parents and friends for  
supporting me  
throughout my master's..."

**Rahul A.**

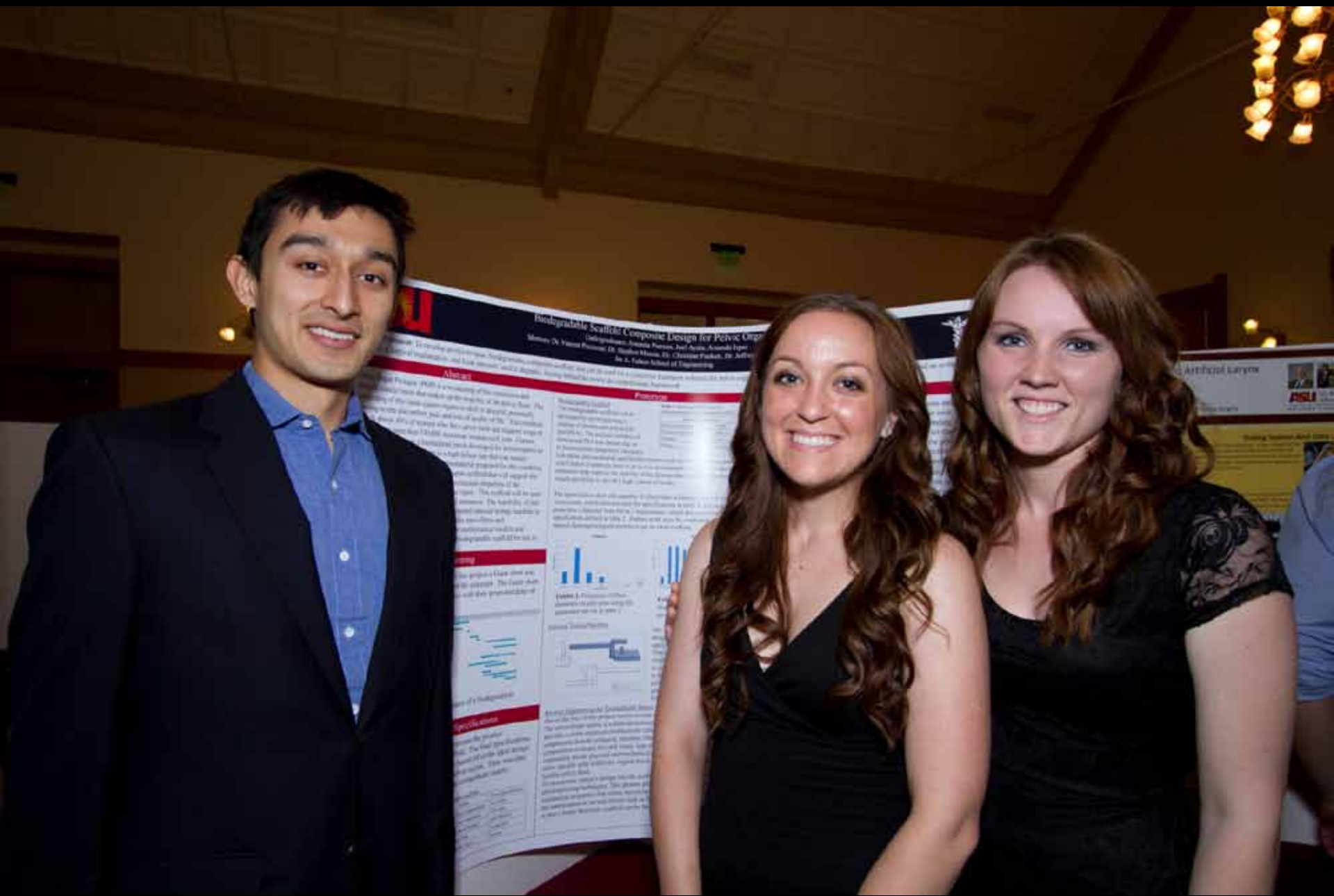
"Godfather: thank you for always pushing me to do my best. Even though you aren't here to see me walk, I know you have the best seat in the house."

**Melissa A.**



"I would like to thank my brother Rajesh Balasubramaniam, grand mom, mom and other family members from India."

**Manikandan A.**



### Inseparable Scaffold: Composite Design for Pelvic Organ Prolapse

Mansoor Q. Younis, Ph.D., Matthew K. Hsu, Ph.D., Chaitanya P. Kulkarni, Ph.D., Jeffrey S. J. Taylor, School of Engineering

#### Abstract

Pelvic Organ Prolapse (POP) is a common condition that affects millions of women worldwide. It is characterized by the descent of the pelvic organs from their normal position. The current treatment options include surgery and pessaries. However, surgery is associated with high morbidity and mortality, while pessaries are uncomfortable and often ineffective. This research aims to develop a novel, minimally invasive, and effective treatment for POP. The proposed scaffold is designed to provide structural support to the weakened pelvic floor muscles and ligaments, thereby preventing the descent of the pelvic organs. The scaffold is made of a biocompatible, porous polymer material that can be implanted via a minimally invasive approach. The scaffold is designed to be porous to allow for tissue ingrowth and vascularization, which is essential for long-term integration and stability. The scaffold is also designed to be flexible and conformable to the pelvic floor, ensuring a snug fit and providing the necessary support. The scaffold is made of a porous polymer material that can be implanted via a minimally invasive approach. The scaffold is designed to be porous to allow for tissue ingrowth and vascularization, which is essential for long-term integration and stability. The scaffold is also designed to be flexible and conformable to the pelvic floor, ensuring a snug fit and providing the necessary support.

#### Procedure

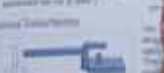
The scaffold is made of a porous polymer material that can be implanted via a minimally invasive approach. The scaffold is designed to be porous to allow for tissue ingrowth and vascularization, which is essential for long-term integration and stability. The scaffold is also designed to be flexible and conformable to the pelvic floor, ensuring a snug fit and providing the necessary support. The scaffold is made of a porous polymer material that can be implanted via a minimally invasive approach. The scaffold is designed to be porous to allow for tissue ingrowth and vascularization, which is essential for long-term integration and stability. The scaffold is also designed to be flexible and conformable to the pelvic floor, ensuring a snug fit and providing the necessary support.

#### Results

The scaffold is made of a porous polymer material that can be implanted via a minimally invasive approach. The scaffold is designed to be porous to allow for tissue ingrowth and vascularization, which is essential for long-term integration and stability. The scaffold is also designed to be flexible and conformable to the pelvic floor, ensuring a snug fit and providing the necessary support. The scaffold is made of a porous polymer material that can be implanted via a minimally invasive approach. The scaffold is designed to be porous to allow for tissue ingrowth and vascularization, which is essential for long-term integration and stability. The scaffold is also designed to be flexible and conformable to the pelvic floor, ensuring a snug fit and providing the necessary support.



Figure 1: Comparison of scaffold properties.



#### Conclusions

The scaffold is made of a porous polymer material that can be implanted via a minimally invasive approach. The scaffold is designed to be porous to allow for tissue ingrowth and vascularization, which is essential for long-term integration and stability. The scaffold is also designed to be flexible and conformable to the pelvic floor, ensuring a snug fit and providing the necessary support. The scaffold is made of a porous polymer material that can be implanted via a minimally invasive approach. The scaffold is designed to be porous to allow for tissue ingrowth and vascularization, which is essential for long-term integration and stability. The scaffold is also designed to be flexible and conformable to the pelvic floor, ensuring a snug fit and providing the necessary support.

#### Artificial Glycerol



"I love you, Mom and Dad.  
You have been everything  
to me. Thank you so  
much!"

**Karthik Nellian A.**

“Thank you for always  
supporting me!”

**Michael A.**

“Gracias por el apoyo a lo largo del camino. Danke für die Unterstützung auf dem Weg. Thanks for the support along the way. Finally finished!”

**Jason B.**



"Proud to be a SUN  
DEVIL"

**Kushal B.**

"I would like to thank my parents and sisters whose constant support and inspiration helped me to successfully complete the Ph.D. program."

**Sujogya B.**

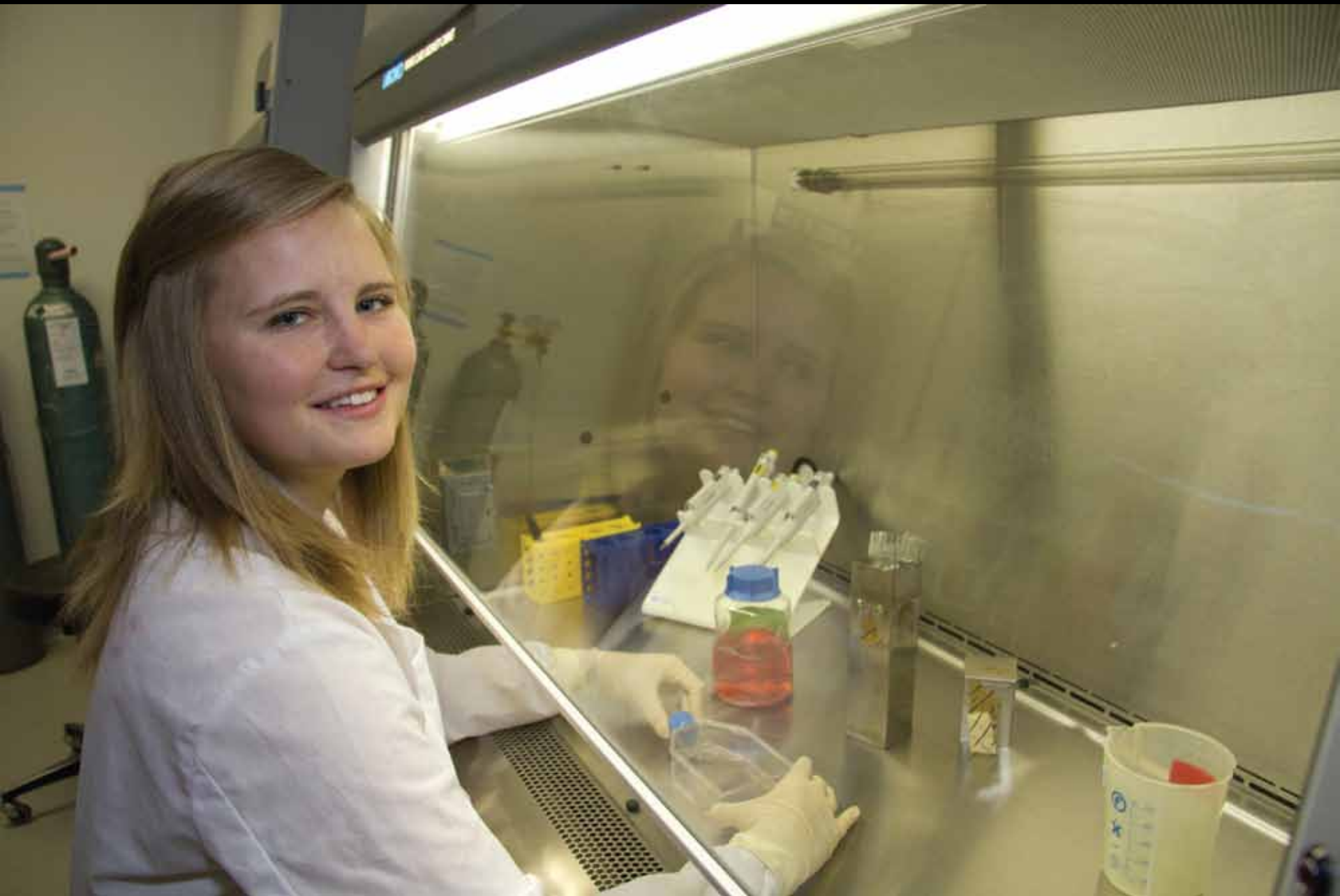


"I thank my parents and my wife for being so supportive during my Ph.D. I thank my advisor Dr. Gupta for guiding me."

**Ayan B.**

"I would not be here today if it weren't for the love and support of my family. Thank you for everything, Mom and Dad."

**Benjamin B.**



“Thank you to my family for their love and support, allowing me to march to the beat of a special drummer. Couldn’t have made it without you!”

**Kaitlin B.**



A photograph of a graduation ceremony at night. The scene is filled with graduates in dark gowns and mortarboards. The background is decorated with numerous balloons in shades of yellow, red, and pink. Bright stage lights illuminate the scene from above, creating a festive atmosphere. A large, semi-transparent red banner is overlaid across the middle of the image, containing white text.

**graduation photos. . .**

**[flickr.com/photos/  
fultonengineering](https://www.flickr.com/photos/fultonengineering)**

**IRA A. FULTON SCHOOLS OF  
engineering**

"To my wife, Venus, and my daughters, Alizah & Ava: Thank you for all of your love and support!"

**Andrew B.**

“Thank you to my Mom and Dad for supporting me, and the rest of my family for always being there for me.”

**Andrew B.**



“Finally made it!! Thanks  
for all of the support,  
family!!!! Love,  
Sunnybadger”

**Sunghae B.**

"Thank you, Mom & Dad.  
Thank you, Othoniel,  
Aaron, Gabriel & Natalie.  
Los quiero mucho! I could  
never have made it here  
without my family."

**Barbara B.**

"I couldn't have done it without all the love, advice, and support provided by my friends and family. I'll make you proud as I move towards my future."

**Ryan B.**

“Thanks are the highest form of thought. Gratitude is happiness doubled by wonder.” –G.K. Chesterton  
Thank you to Melissa, all my friends and family!”

**Vincent B.**



“Thank you, Mom and Dad, my brothers and my family for all the support. Special thanks to my husband, AJ.”

**Anushree B.**

"Thank you, Appa, Amma,  
Yashu and all others who  
have been an inspiration  
to me through the years."

**Shreyas B.**

"ASU has been the best four years of my life and I hate to see it end. Special thanks to my parents for their emotional and financial support."

**Samuel B.**



"I am here because of my family. Thank you for your love and support. I love you all dearly! Grandma Desbah, this is for you! Phil 4:13."

**Bronwyn B.**

“To my friends and family that have contributed to my development and landed me here today, I say with unconditional gratitude and love, ‘Thank You!’”

**Erik B.**

"A special thanks to my  
parents and family for  
making this all possible."

**Ryan B.**

“Mom, Dad and Nana,  
thank you for your  
continued love and  
support. Without your  
help, I would never have  
made it to this day.”

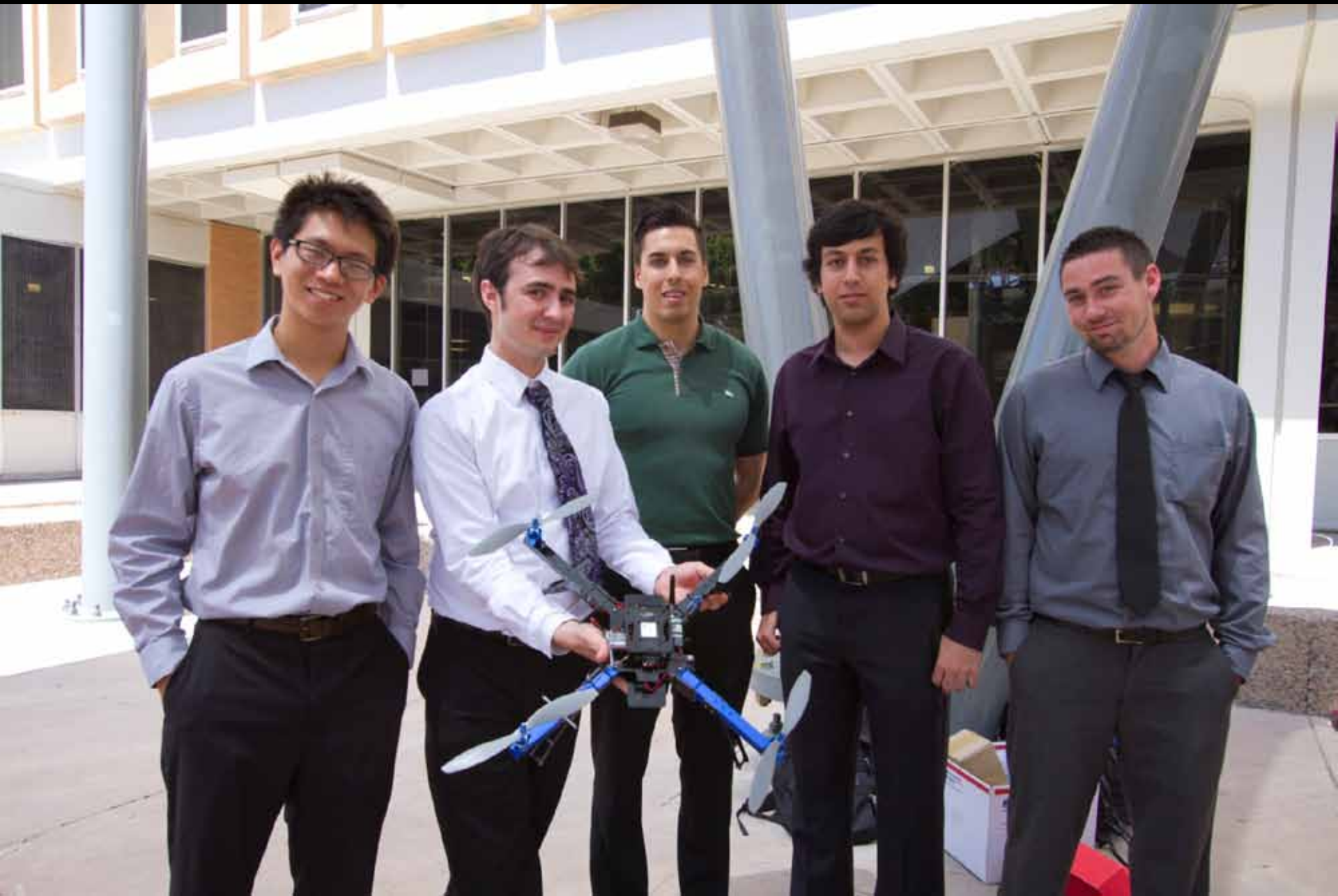
**Marcus B.**

“Thanks, Mom and Dad,  
for supporting me in my  
new direction in life! It’s  
been worth it!”

**Matthew B.**

"Mom, Dad, & Michael -  
Thank you for everything!  
Love, Banana."

**Breana B.**



"Thank you to all of my family, friends and professors for all their support and good memories! Love you all! <3."

**Megan B.**



“Thank you for supporting me through the years. I love you all!”

**Joseph B.**

"I am here because of  
YOU! I love you, Mom,  
Dad, Miki, Nannie and  
Tata!!"

**Natalie B.**

“Thank you for all of your support during my studies, I love you! - Taylor The Big Bird Baylor”

**Taylor B.**

“Couldn’t have done this without my amazing parents and boyfriend! Thanks for everything, love you guys!”

**Lindsey B.**

“Life is and will ever remain an equation incapable of solution, but it contains certain known factors.’ To my family and friends Volim Vas.”

**Zoran B.**



“Thanks to all of my extended family for all of their wonderful support.”

**Adam C.**

“Thank you!”

**Kevin C.**





**don't forget to write. . .**

**fullcircle.asu.edu**

**the engineering alumni magazine**

**IRA A. FULTON SCHOOLS OF  
engineering**

“Ellie and Rosie, Dad is finally done with school.”

**Maurice C.**

"Thank you Bill & Tish  
Carney for all your help  
putting me through  
school and getting me to  
where I am today. Love,  
your son. -Billy"

**William C.**

"The earliest goat is not  
always the wisest."

**Matthew C.**

“Thanks to everyone who has made my life in ASU wonderful! A big hug to my cousin Janaki Jain who has helped me with everything in these two years.”

**Supriya C.**

"Mom and Dad, I love  
you."

**Wei C.**

“Spending just two years at ASU has been the great learning voyage one can expect as a student.”

**Pranav C.**

“Friends, fun, research  
and Four Peaks. This is  
what ASU is for me!”

**Sundara Raman C.**





"A huge thanks to my family for your support, patience and blessings as I earned my graduate degree. Especially Nabeel... you have been my rock!!"

**Ussala C.**

“To all of my family and friends: I couldn't have asked for a bigger support system. Thank you for your motivating words and always believing in me!”

**Emily C.**

“Forever grateful for the support my parents, brother and sisters have provided the past 22 years. Thank you!”

**Martin C.**

"Thanks to my family and friends for being there to support me throughout this whole process. You made this happen. Love you all!"

**Joshua C.**

"I would like to thank my beautiful parents, William Collazo and Marisa Pigozzo, for being supportive of me and encouraging my success. Thank you."

**Manuel C.**

“Thank you to my dad,  
mom and grandparents,  
without whom I would not  
be graduating today.”

**Justin C.**

"I would like to thank my family for standing behind me and God for carrying me through."

**Carrie C.**





“To anyone who ever doubted us... look where we're at now!

Congratulations, Class of 2013! We did it!”

**Rosemarie C.**

“Thank you, Mom and Dad, for everything! To all my friends in ASU: Thank you for all the great times we had together!”

**Glenn D.**

“Time sure does fly. I’m graduating!! Thanks to everyone that supported me through it all. =)”

**Zachary D.**



“Best family in the world!  
I love you guys dearly  
and I am happy to  
celebrate this special day  
with you. Los amo a  
todos!”

**Luis Antonio D.**

"I want to thank all my family members for supporting me all these years. Without them, I would not be at where I am today."

**Jesse D.**



**twitter. . .**

**#asugrad**

**IRA A. FULTON SCHOOLS OF  
engineering**





"Started from the bottom,  
now we're here. - Sir  
Edmund Hillary (first  
person to climb Mt.  
Everest)."

**Steven D.**

“Special thank you to my wife and mother for their loving support.”

**Kevin D.**

"I'd like to thank my family and friends for standing by me and supporting my long journey here at Arizona State University."

**Jonathan D.**

“Honeybadgers 4 life!!!!”

**Lance D.**

“From chicken farmer to  
master engineer!”

**Jason D.**

"YOU GET OUT OF  
HERE!"

**Rebecca D.**

“I would like to send out a thanks to my family for always being there for me and supporting me! I wouldn't have been able to do it without you!”

**Roger D.**



“Mom, Dad, Heather, Kevin,  
and friends and family—  
Thank you so much for all  
of the support throughout  
all of my schooling. You  
guys are awesome!”

**Travis D.**

“Thanks to my family. Could not have done without you guys! This is just the beginning, have much more to achieve and accomplish.”

**Vema D.**

“Thank you, Mama and  
Baba, Seedo and Teta,  
and the rest of my  
wonderful family. I love  
you all so much!”

**Saad E.**



“Thank you to my  
wonderful, loving family.  
Love you Alex, Olivia,  
Mom, Dad, and Maggie!!”

**Austin F.**

"A chapter ends, another begins. Thank you for being there the whole way."

**James F.**



A photograph of a graduation ceremony at night. The scene is filled with graduates in dark gowns and mortarboards. The background is decorated with numerous balloons in shades of yellow, red, and pink. Bright stage lights illuminate the scene from above, creating a festive atmosphere. A large, semi-transparent red banner is overlaid across the middle of the image, containing white text.

**graduation photos. . .**

**[flickr.com/photos/  
fultonengineering](https://www.flickr.com/photos/fultonengineering)**

**IRA A. FULTON SCHOOLS OF  
engineering**



“To my friends & family, thank you for your continued support over the past four years! I appreciate all you have done and continue to do!  
#GSD”

**Lindsay F.**

"25 years later, I did it."

**Alaric F.**

"Thanks to Hunter Null,  
Cameron Null, Joe Fralick,  
Jit Muthuswamy and  
friends for getting me  
through nine years part-  
time to get my Ph.D!  
FINALLY!"

**Celeste F.**

“The more I have been at ASU, the more I love it! As an engineer here I have been given so many opportunities. Thank you, Mom and Dad, for everything!”

**Darcy F.**



"I would like to thank my parents, Ron & Tami, for all the guidance and support through this long road. We finally did it.  
Love, Chris"

**Chris F.**

“Thanks to my famous 5 friends, family and my dearest Sharon for helping me throughout my education. Thank you Sarvatha! You all mean a lot in my life!”

**Kowshik G.**

“Thank you for giving me the opportunity and placing me in the environment to get where I am at today. Forever grateful.”

**Philippe G.**



"THANK YOU MOM. I  
LOVE YOU."

**Chase G.**

“Thank you Mom and Dad for supporting and encouraging me through my educational experience. I could not have made it through without you!”

**Nathan G.**



**SHISE** Spring 2014  
School of Biological and Health Systems Engineering  
Harrington Program of Engineering

# The Hand TherAssist

Nathan Giv and Juan Laffero  
Mentors: Dr. Jeffrey Klein and Marco Saracino  
School of Biological Health Systems Engineering - Ira A. Fulton



**DESCRIPTION of Hand Structure**  
The hand is a complex structure consisting of 27 bones, 30 muscles, and 100,000 nerve endings. It is designed to be able to grasp, hold, and manipulate objects. The hand is also capable of fine motor skills, such as writing and playing an instrument. The hand is a remarkable piece of machinery that has evolved over millions of years.



"All thanks to my wonderful family, professors and friends. Couldn't have made it without your constant support and prayers! :)"

**Divya G.**

“Experience of a  
lifetime!!! Thank you,  
ASU!!!”

**Vipul G.**

“I would like to thank my husband, Jason Giers, and my parents for their love and support throughout this experience. I love you all.”

**Morgan G.**

“Thanks to all of the friends/family that supported me and made this day possible!”

**Joseph G.**

“Million thanks to amma, appa, jill, athimber and all my friends for standing by me and supporting me these 2 years! Love you all!”

**Priyadarshini G.**



“My family is the reason for my success and I never would have been able to accomplish all of this without their support. I love you all so much.”

**Aaron G.**

# An Inexpensive Upper-Limb Prosthetic for Developing

Country: *Western Countries*

Author: *Theodore S. Smith*

School of Mechanical & Health Systems Engineering  
The University of Queensland  
St. Lucia, Queensland, Australia



Abstract of the Paper: *Upper-Limb Prosthetic*



Other research posters are visible in the background, including one titled "Design of a Prosthetic Hand for the Developing Country".

“Thank you ASU. It was a wonderful two years here.”

**Vijay G.**

"I would like to extend a special thank you to all my friends and family. Without your support I would not have been able to achieve all that I have!"

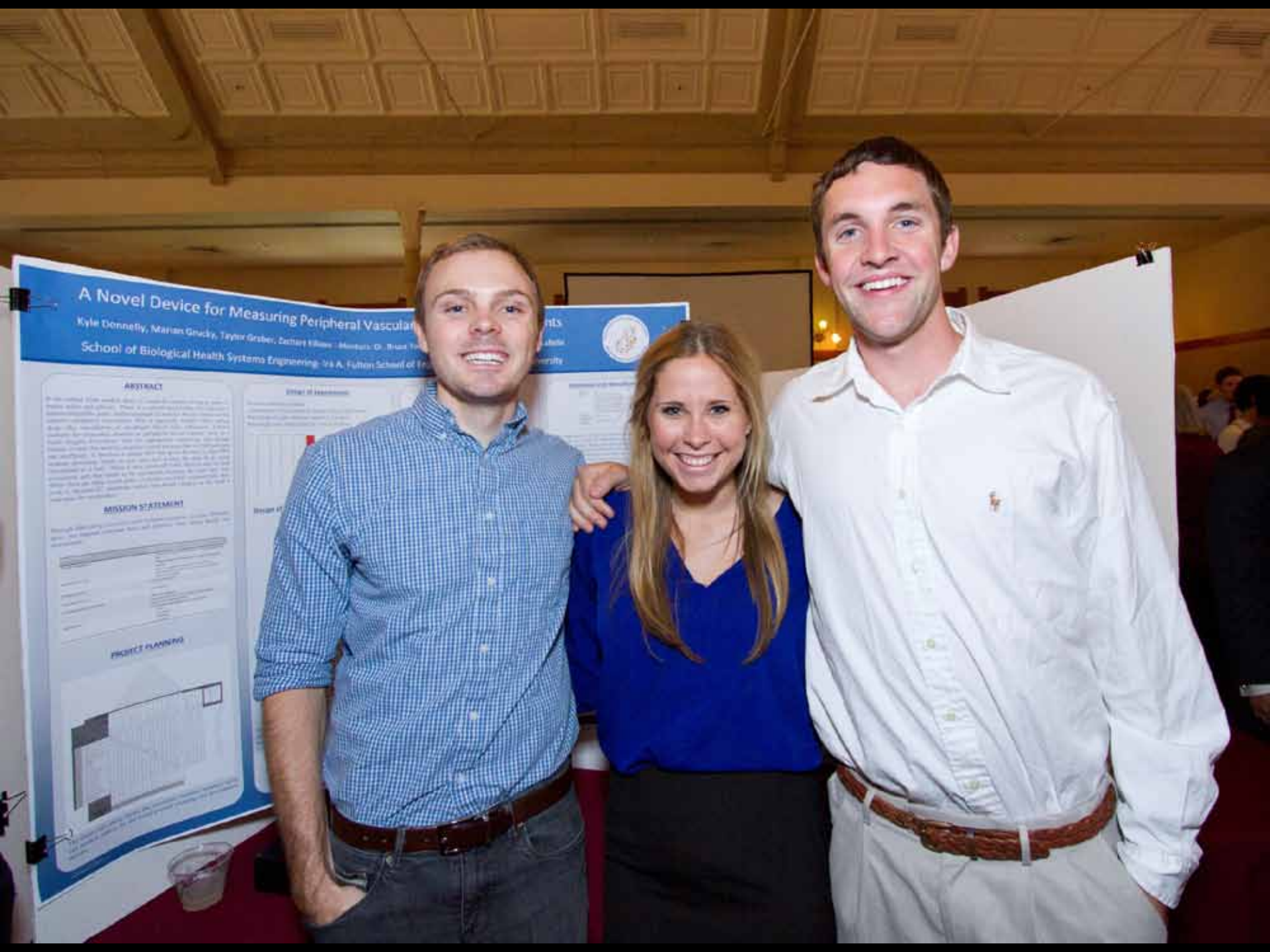
**Taylor G.**



twitter. . .

**#asugrad**

IRA A. FULTON SCHOOLS OF  
**engineering**



# A Novel Device for Measuring Peripheral Vascular

Kyle Donnelly, Marian Grucky, Taylor Graber, Zachary Ellsaw - Mentors: Dr. Brian Taylor, Dr. L. A. Fothergill, Dr. Ira A. Fothergill  
School of Biological Health Systems Engineering, Ira A. Fothergill School of Engineering

## ABSTRACT

Peripheral vascular disease (PVD) is a leading cause of morbidity and mortality in the United States. PVD is characterized by the narrowing or blockage of arteries that supply blood to the limbs. This is a common condition in people with diabetes, high cholesterol, and high blood pressure. PVD can lead to serious complications, such as heart disease, stroke, and limb loss. Current methods for measuring PVD are often invasive and expensive. A novel device for measuring PVD is being developed. This device will use a non-invasive method to measure the blood flow in the arteries of the limbs. The device will be used to measure the blood flow in the arteries of the limbs in people with PVD. The device will be used to measure the blood flow in the arteries of the limbs in people with PVD. The device will be used to measure the blood flow in the arteries of the limbs in people with PVD.

## MISSION STATEMENT

The mission of this project is to develop a non-invasive device for measuring peripheral vascular disease (PVD) in the limbs. The device will be used to measure the blood flow in the arteries of the limbs in people with PVD. The device will be used to measure the blood flow in the arteries of the limbs in people with PVD. The device will be used to measure the blood flow in the arteries of the limbs in people with PVD.

## PROJECT PLANNING



"I have experienced loss, love, support and happiness through this journey. I will always remember what you have done for me."

**Anthony G.**

“Thank you, Mom, Dad,  
AJ and Sam! I couldn’t  
have done this without  
you. Love you all.”

**Marian G.**





"Thank you, Kaushal! I could not do it without your support! Thanks to my parents and brothers for everything they have done for me!"

**Arti G.**

“Thank you to my Mom & Dad for always supporting my educational efforts, from kindergarten until now. And other family members too! I love you guys!”

**Brent H.**



"ASU has opened so many doors for me! I am forever grateful for the unfailing support of my family, friends and the BME faculty."

**Sarah H.**

"Ammi, Abbi, Nyle, Nani & Fluffy, thanks for the unconditional love, support & motivation, for keeping me close to my faith and encouraging my goals < 3."

**Neekta H.**

“Thank you for all the support through the years and the continued support as I continue on to grad school!”

**Matthew H.**

“Thanks to all my friends and family, especially my parents. I would not be here today without you.”

**Joseph H.**



"Thank you, mom and dad, for helping me be the best I can be. I could not have done any of this without you (you too Gray)! I love you all! –Mo"

**Morgan H.**

“Couldn’t have done it  
without all your love,  
family and friends!!  
MUAH!”

**Colleen H.**

“Thank you, everyone, for helping me get through school! I couldn’t have done it without you.

**Jared H.**

"I want to thank my family for all of the support they have given me through my years here at ASU. I couldn't have made it through without them."

**Shawn H.**

“Baba Mama, wo ai ni  
men!”

**Li H.**

“Thank you, Gina, Russ and Michele. I would not be where I am now without your support. I love you guys!”

**Justin H.**

"Look, Mom and Dad, I'm on the Jumbotron! P.S. Thank you to my family and friends for always supporting me."

**Nicholas H.**

“Quiero agradecer a mis padres, Mario y Rosa, por el apoyo y aliento a lo largo del camino. I love you! Tony and Alex too! We did it!”

**Mario H.**



“Thank you, friends and family, for your continuous support. It has been an exciting adventure and I am happy to share this moment with all of you.”

**Michael H.**

"ASU has been a great experience, full of growth and learning. The knowledge and skills learned will benefit my family and career life."

**Casey H.**

„\*\*\*\*Thank you, Mom,  
Ken, Nony and  
Heidi...YOU made this  
possible!!\*\*\*\*“

**Timothy H.**

“Thank you to all my family and friends that have supported me through my college career!!”

**Todd H.**



**don't forget to write. . .**

**fullcircle.asu.edu**

**the engineering alumni magazine**

**IRA A. FULTON SCHOOLS OF  
engineering**

"To my family - I love you all!  
Thanks for the support and  
inspiration."

**Skyler H.**



“ASU has provided me life changing opportunities with an excellent education, and now I’m finally graduating as a biomedical engineer!”

**Caroline H.**



“Thank you to my family and all my friends who supported me through college.”

**HeeRan H.**

"I thank God for providing me this great educational opportunity, and my parents for supporting me and the many sacrifices they made these last 4 years."

**Kenneth H.**

“My mom always said ‘T’áá hwó ájít’éego dee’ya’, to me this means my dreams are my own accomplishments. Thank you to all my family for your support.”

**Sandra H.**

“Thanks to all my family for their support and putting up with me!”

**Jacob H.**

“Thanks to my family for the love and support.”

**Jason H.**

“Being selfless is easy. Being true to yourself, your morals & values, can be much more difficult. Thank you to those who helped me be true to myself.”

**Sebastian H.**



**Strength of Lower Limb**

**Conclusion**

**Arizona State University**

**ASU**

The poster board contains several sections of text and graphics. At the top left, there is a graph showing a curve that rises and then plateaus. To its right is a photograph of a person's lower leg and foot. Below these are several paragraphs of text, some of which are partially obscured by a 3D model of a red and blue rectangular object with internal components. The bottom of the poster features the Arizona State University logo and a row of colorful icons.

“Thank you to my friends, my husband Jon, and parents for all their support!”

**Robin H.**



“Quiero agradecer a mi familia por siempre estar a mi lado, apoyandome y aconsejandome. Sin ellos no hubiera logrado ser la persona que soy ahora.”

**Marcos I.**

“Thank you to all of my family, friends and classmates that helped me get through college. Couldn’t of done it without you guys.”

**Frank I.**

"ASU will always be a special place for me for its nice environment, recreation, friendliness and above all its excellent research and learning scope."

**Qazi I.**

“Thanks, Mom, Dad, Jaymie,  
Lindsay and Ty for dealing  
with all my stress and bad  
moods the past two and a  
half years...I Love all of you!”

**Eric I.**

“Thank you, mommy and daddy, and best friend for being wonderful and supportive!! Love you :) Love, Amanda”

**Amanda I.**



"Thank you, Mom and Dad,  
for making me what I am. I  
hope I have made you proud."

**Srinidhi I.**

“Thank you Mom and Dad for always encouraging me to strive forward and believe in myself.”

**Mark J.**



“Raised by my wonderful family and surrounded by such amazing friends. I am truly blessed and thankful. I love you, to infinity and beyond. Thank you!”

**Tate J.**

Development of a Disposable Intra-arterial Biosensor for Cardiovascular Disease (CVD) Detection

**ASU**  
ARIZONA STATE UNIVERSITY

B1

**Abstract:** Development of a disposable biosensor for Cardiovascular Disease (CVD) detection in American adults suffer from CVD and the lack of time-of-care testing, and developing a set of fabricated devices specific to the CVD biomarkers specific to HbA1c, BNP, and highly sensitive and specific to the CVD biomarkers. The design and development of a disposable intra-arterial biosensor for manufacturing the prototypes and assessing the prototype against specifications for both prototypes were met. All product development

**The Need**

Cardiovascular Disease (CVD) is an inflammatory condition characterized as the total blood vessels in the body become narrowed and eventually lead to heart disease, congestive heart failure, myocardial infarction, and congestive heart failure. Approximately 1/3 of the adult population in the United States suffer from CVD. The lack of time-of-care testing will be possible, and the cost of testing will be reduced through multiple sensors. The lack of time-of-care testing supports the development of a disposable intra-arterial biosensor. The research for this project will be possible, and the cost of testing will be reduced through multiple sensors. The lack of time-of-care testing supports the development of a disposable intra-arterial biosensor. The research for this project will be possible, and the cost of testing will be reduced through multiple sensors.

**Final Product**

Biosensor for Cardiovascular Disease (CVD) Detection

Engineering

LaBelle, PHD

Engineering at Arizona State University

**ASU** **FULTON**  
SCHOOL OF ENGINEERING

This research was presented to the audience at the 2011 ASU Biosensor Symposium. The research was presented to the audience at the 2011 ASU Biosensor Symposium. The research was presented to the audience at the 2011 ASU Biosensor Symposium. The research was presented to the audience at the 2011 ASU Biosensor Symposium.

**Alpha Calibration Curves**      **Beta Calibration Curves**



Figure 1: The figure shows the calibration curves for the alpha and beta sensors. The alpha sensor has a sensitivity of 0.15 and the beta sensor has a sensitivity of 0.15. The sensor has a sensitivity of 0.15 and the beta sensor has a sensitivity of 0.15.

**Conclusion**

The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection. The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection. The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection.

**Future Work**

The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection. The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection. The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection.

**Acknowledgments**

The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection. The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection. The research project was able to demonstrate the design of a disposable intra-arterial biosensor for CVD detection.

“Thank you mom, dad, chechi  
and all my relatives who  
believed in me and thank you  
God for all the blessing!!!”

**Dinu J.**



A photograph of a graduation ceremony at night. The scene is filled with graduates in dark gowns and mortarboards. The background is decorated with numerous balloons in shades of yellow, red, and pink. Bright stage lights illuminate the scene from above, creating a festive atmosphere. A large, semi-transparent maroon banner is overlaid across the middle of the image, containing white text.

**graduation photos. . .**

**[flickr.com/photos/  
fultonengineering](https://www.flickr.com/photos/fultonengineering)**

**IRA A. FULTON SCHOOLS OF  
engineering**

“Love you Mom & Dad!”

**Sam J.**

“Dear Mom, Dad & Sam, you guys are the best!! This one’s for you!”

**Rejish J.**





“Gracias a mi familia por todo el apoyo, sin ustedes no estaria aqui! Thanks to all the support from my family, I am here!”

**Fernando J.**



"Keep a cool tool and don't  
let your meat loaf. - Taylor  
Lais Well, I guess that's it!  
Bye ASU! AOC (and CGC)  
President - RESPECT!"

**Nathan K.**

"GO SUN DEVILS !!!!"

**Srinag K.**

“This one is dedicated to you,  
Mom and Dad. Love you!!”

**Aditya K.**

"My parents represent the single greatest influence on my life, gratitude ain't enough. Ankur, I owe you for the good times... and million other things."

**Shruti K.**

“Thank you to each and every one of my family members. Thank you dad, Darrell, Darnell, Delavina, Delbert, Trevin and Ashley. You made this possible!”

**Dominic K.**





“It was an honor, ASU! May our paths cross again in the future...or not! Thanks for coming all the way from Turkey, Mom, I love you! SUN DEVILS!”

**Yigit K.**

"Thanks Mom, Dad, Dan and  
Shadow!"

**Brian K.**

“Thank you to my friends and family for always being there for me.”

**Haroon K.**

“This day wouldn’t have been possible without God’s grace, and my wonderful family— Mom, Dad and Bhai. Also, I thank my loving and supportive friends.”

**Snigdha K.**

“It is not the mountain we conquer, but only ourselves! Thank you to all of my family and friends who continuously inspire me to follow my heart.”

**Zachary K.**

“Did diligence.”

**Jinku K.**

“My family is the biggest part of my happiness and success. Thank you for all of your love and support. We did it!”

**Summar K.**

“When you see this, please play a quick game of roshambo with the person sitting next to you. Thank you ASU for making this possible. Thanks Mom!”

**David K.**



“Thanks, Pappoose,  
Ammoose and Juboose!  
Looks like I finally made it.  
Looking forward to the next  
one. Love you guys!”

**Jaime K.**

“To all my family, and especially my wonderful parents. I cannot thank you enough for shaping me into the man I am today. Love you guys!”

**Austin K.**

"Its been a memorable  
experience."

**Raghavendra K.**

"Thank you for all your support and encouragement, could not have done this without you guys."

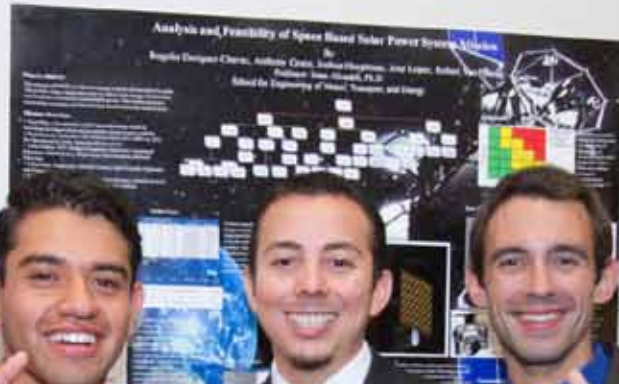
**Anirudh K.**

"Thank you, Mom and Dad!  
Thank you, Jason! Love,  
Jane."

**Jane L.**



For technical assistance with computers in this room, please call



“Thank you Lord Jesus!”

**Juan L.**

“I can do all things through Christ who strengthens me! -  
Philippians 4:13 I love you,  
Mom and Dad! Thanks for all  
of your loving support! Love,  
Ryan”

**Ryan L.**





Building  
Engineers  
you Dr. Fulton!

THE GIFT OF  
TECHNOLOGY  
FULTON STATE

“My love and gratitude to my family, friends and church community who supported me through all the fun times and late nights. Go Devils!”

**Eric L.**

“Much thanks to the Jackie & Paul Lehnhoff Scholarship donors who helped fund my education and all of the fun experiences I have enjoyed at ASU!”

**Kristin L.**



“Thank you to my parents,  
Ron and Lena, for your  
patience and support during  
my career at ASU.”

**Mathew L.**

“Thank you mom and dad for  
da monehneh.”

**Steven L.**

“I would like to thank my  
parents and everyone who  
helped me!”

**Shu Wai L.**

“Thank you!!!”

**Mengren L.**



"I love you, Mum (Wang Lihua) and Dad (Li Zhenhua)! Many thanks to my friends, especially Dangdang Shao, Siyuan Wei, Xiaochen Xu, Ziteng Ma, Sha Liu."

**Bosen L.**

"A big thank you to my family.  
You all made this day  
possible."

**Jaclyn L.**

"Pew Pew Pew Thanks, Mom and Dad. Without you I wouldn't have had the opportunity to want to move away to another state! AZ is great just hot during summer."

**Andrew L.**

“Thank my parents, friends  
and all people who love me!”

**Yu L.**

“Thank you to the Lolly family, Taekwondo family, and friends for the support they provided and sacrifices they made for me to accomplish this goal.”

**Rubben L.**

“Thank you, Mom and Dad,  
for all your love and support  
these past 4 years, I could  
not have done it without you!”

**Manuel L.**

"Thank you, family, for always being there for me. A special thanks to you, mom, for always keeping me on top of things. I love you guys very much! Thanks"

**Jose L.**

“It’s been an amazing journey!  
Thank you to everyone who  
shared in this experience  
with me. I couldn’t have done  
it without you guys. Love you  
all!”

**Alexander L.**



“Gracias papitos lo logramos.”

**Suyana L.**



A photograph of a graduation ceremony at night. The scene is filled with graduates in dark gowns and mortarboards. The background is decorated with numerous balloons in shades of yellow, red, and pink. Bright stage lights illuminate the scene from above, creating a festive atmosphere. A large, semi-transparent red banner is overlaid across the middle of the image, containing white text.

**graduation photos. . .**

**[flickr.com/photos/  
fultonengineering](https://www.flickr.com/photos/fultonengineering)**

**IRA A. FULTON SCHOOLS OF  
engineering**

"To my family and friends for supporting me through these four years. I love you all and appreciate everything you've done for me."

**Mayra L.**

“Thank you to all my friends  
and family for their support.”

**Sean L.**

“Thank you to all family and friends for all your support and encouragement along the way. I would not be here today if it wasn't for you!”

**Jonathan L.**

“Mom and Dad, thank you for your support both financially and spiritually through these four years. I am proud to be your son. With love, PJ”

**Patrick L.**

“Mom, Dad and Hayley,  
Thank you for supporting me  
and helping me the whole  
way. I couldn't do it without  
you. Love, Beth”

**Beth M.**



“For all of the help and support from my awesome friends and family, a simple ‘thank you’ is hardly enough to express the depth of my gratitude!”

**Christian M.**

“Thanks, Mom & Dad,  
couldn't have done it without  
you!! GO DEVILS!!”

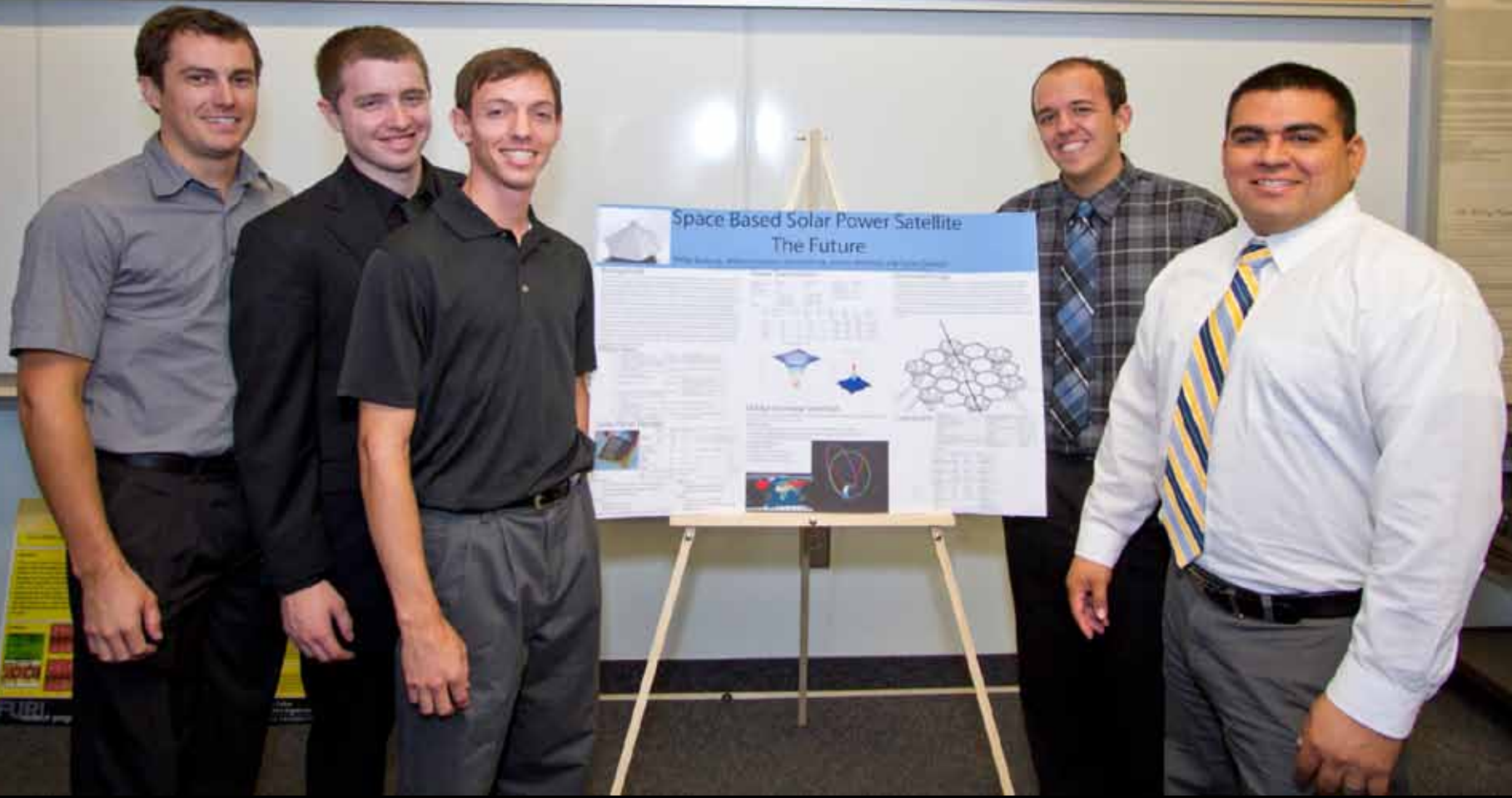
**Jacob M.**

“Thank you, Mom and Dad,  
for all your help and support!  
I couldn't have done it  
without you! Love, Patty”

**Patricia M.**

“Thank you, Martinez family,  
for all your encouragement  
during these college years  
and a special thank you to  
my wife Jessica for never  
letting me quit!”

**Arturo M.**



### Space Based Solar Power Satellite The Future

*By: [Name], [Title], [Organization]*

**Introduction**

Space Based Solar Power (SBSP) is a concept that involves collecting solar energy in space and transmitting it to Earth via microwave or laser beams. This technology has the potential to provide a constant and clean source of energy, independent of weather and geographic location.

**Advantages**

- Constant energy collection (24 hours a day, 365 days a year)
- High efficiency (不受天气影响)
- Reduced land use
- Scalability

**Challenges**

- High initial costs
- Space launch limitations
- Beam spreading and atmospheric absorption
- Space debris and safety concerns

**Future Prospects**

As space technology advances, SBSP is becoming a more viable option for meeting the world's growing energy needs. Several countries and private companies are currently conducting research and development in this field.

**Conclusion**

Space Based Solar Power Satellites represent a significant step towards a sustainable and secure energy future. Continued investment and innovation in this technology will be crucial for realizing its full potential.



“Thank you, mom and dad.”

**Omkar Anilrao M.**

"Alhamdulillah! Ammu and Abbu, I won't be able to thank you enough for what you have done for me, but...THANK YOU!!!!!! :)"

**Munaf M.**

“Thank you for the help and support here at ASU! I wish my fellow engineers good luck in their endeavors in life.”

**Aakash M.**



"Thank you to all of my family and friends that helped me through these last 4 amazing years."

**Kyle M.**



“Here’s an embarrassing big-screen thank you to my parents, Steve and Valeri, for dealing with me through engineering school. Love you!”

**Julie M.**

“To my family: Thank you for telling me that I can. To my friends who have not seen me for the last 4 years: It’s over! Let’s catch up!”

**Troy M.**

“Couldn’t do it without your support. Love you Mom and Dad!!!”

**Ruben M.**

“Thank you, Dad and Darsel,  
for everything you have done  
to help me get here today! I  
love you guys!”

**Steven M.**



“It’s hard to believe that I made it this far. Thank you to my friends and family for making it possible. I love you all. Love, Christopher”

**Christopher M.**



"I thank my friends, dad, cousins and my aunt for being there for me during the ups and downs of my graduate life outside of my home, country & people!"

**Darshana M.**

“This sure is a great moment in my life. I thank my Appa, Amma, family, friends & God for all the support and love. Yay!! I made it!!”

**Deepika M.**

“Thank you, John and Linda Monje! Without your love and support this never would have been possible. I owe this day to both of you.”

**Kyle M.**

“I would not have been able to excel as far as I have without the support of my friends and family! I can't believe I am graduating. Love you all!!”

**Kristin M.**

"I thank my father for this achievement."

**Vasanth M-P.**

"Thank you, Linda and Tom  
Embry."

**Fernando M.**

"I would like to thank my family for always being supportive of me going back to school."

**William M.**





“Thank you, everyone, for all you have done. I wouldn’t have made it without you. You are all amazing!! Love, Aaron”

**Aaron M.**

“Thank you for everything!”

**Vivek M.**

"I love lamp."

**Steven M.**

“Dear Mom and Dad, you may be 15,000 miles away from me yet you are so close to my heart at this moment. Thank you for everything you have given us.”

**Rajthilak M.**

"I would like to thank my father and mother for their support and for everything. I am what I am today only because of them."

**Prashanth M.**



**don't forget to write. . .**

**fullcircle.asu.edu**

**the engineering alumni magazine**

**IRA A. FULTON SCHOOLS OF  
engineering**

“Thanks to my family; Nahlik  
is Power!”

**Matthew N.**

“Thank you all for your continuous support and guidance. You all brought joy to my special day by joining me in this celebration.”

**Pramit N.**



“Education is the best gift that parents can give to a child. I am proud to say that I am MS today. Thanks, mom and dad, for ur support. Lots of love.”

**Madhur Sunil N.**

“Thanks to my kind friends  
and wonderful family :) Love  
you all...”

**Karthikeyan N.-R.**

"Thanks to my friends for their support. Special thanks to my mom and dad for their love."

**Manish N.**

"I want to thank my family, especially my mom and my aunt, and my friends for their endless support and encouragement."

**Thao N.**

“Don't cry because it's over,  
smile because it happened.” –  
Dr. Seuss. Also, now is a  
pretty good time to ask your  
parents for money.”

**Michael N.**

"I plan to return to ASU in the fall to complete my master's in management degree with the W.P. Carey School of Business."

**Minh N.**

“Thank you to my family—  
Mom and Dad, Joe and  
Andy—who have supported  
me throughout my time here  
at ASU. I love you!”

**Emily N.**





"Mr. and Mrs. Okeke, thank you so much for believing in me, supporting me and my decisions every step of the way to successfully get here. Now let's graduate."

**Ikenna O.**

"Thank you, mum and dad,  
for supporting me  
throughout my college  
degree luv you so much."

**Thelma O.**

"Thank you for all your  
support and love."

**Mathew O.**

"I love you family! Thanks  
ASU!"

**Gerald O.**

“There are no words to express my gratitude for all of your support. From money and food, to late night video game sessions, I thank God for all of you.”

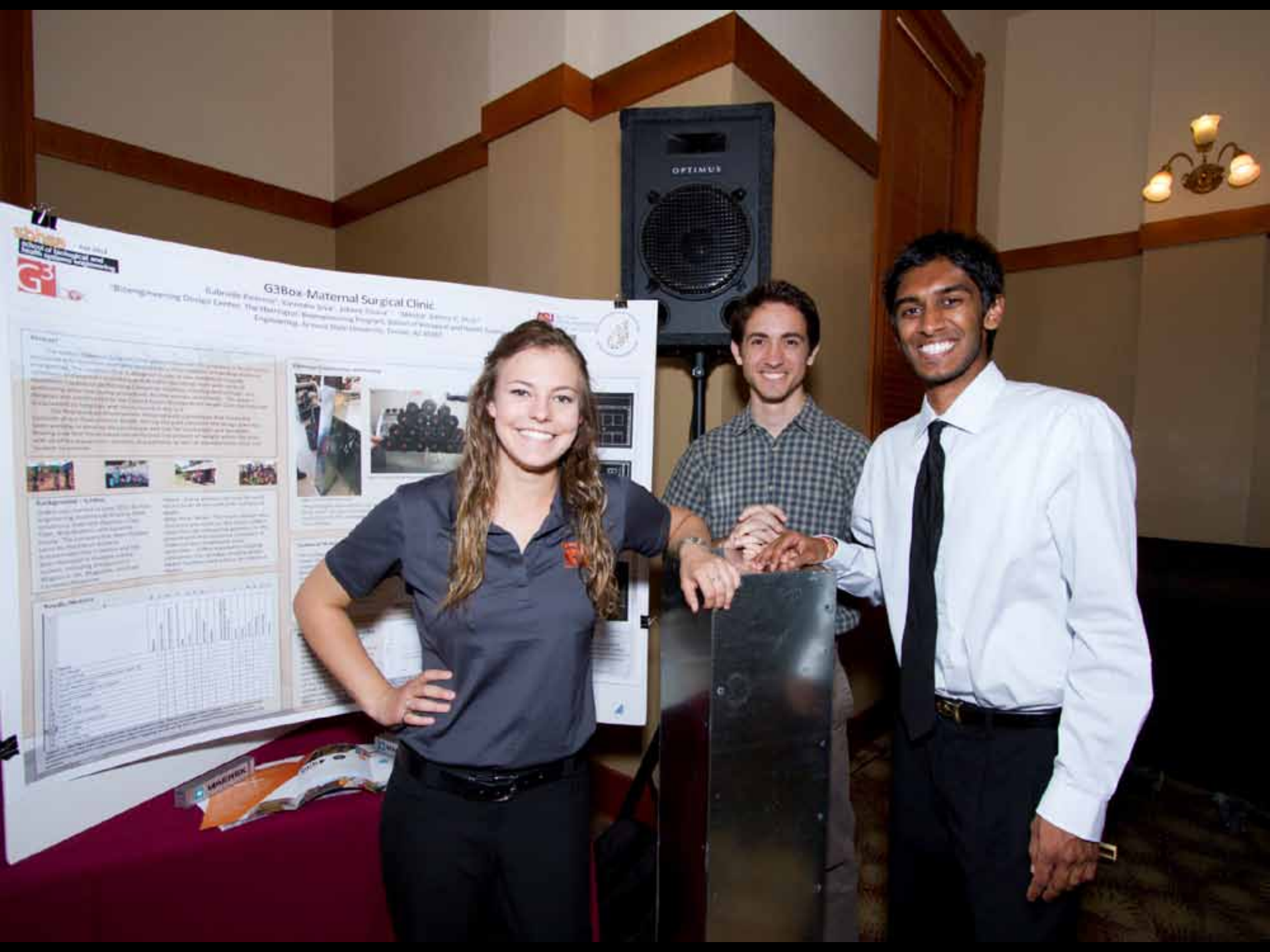
**Victor O.**

“As a high-school dropout, I never thought 8 years of college would be so fun!”

**James P.**

"I would like to thank my family, friends, professors and ASU for helping me achieve this success."

**Balaji P.**



2014  
SOCIETY OF ENGINEERING AND  
TECHNOLOGY  
G3

### G3Box: Maternal Surgical Clinic

Subacute Patients, Synthetic Vessels, Jigsaw Puzzle - "Molly" Simon, et al.  
The Barrington Engineering Program, School of Mechanical and  
Engineering, Arizona State University, Tempe, AZ 85287

**Abstract**  
The purpose of this project is to design a low-cost, portable, and easy-to-use device for the diagnosis and treatment of maternal surgical patients. The device is designed to be used in a hospital setting, and it is intended to be used by medical professionals. The device is designed to be used in a hospital setting, and it is intended to be used by medical professionals. The device is designed to be used in a hospital setting, and it is intended to be used by medical professionals.



**Background**  
The purpose of this project is to design a low-cost, portable, and easy-to-use device for the diagnosis and treatment of maternal surgical patients. The device is designed to be used in a hospital setting, and it is intended to be used by medical professionals. The device is designed to be used in a hospital setting, and it is intended to be used by medical professionals.

**Table 1: Performance Metrics**

Metric	Value
Accuracy	95%
Precision	92%
Recall	90%
F1 Score	92%



**Conclusion**  
The purpose of this project is to design a low-cost, portable, and easy-to-use device for the diagnosis and treatment of maternal surgical patients. The device is designed to be used in a hospital setting, and it is intended to be used by medical professionals. The device is designed to be used in a hospital setting, and it is intended to be used by medical professionals.





“Thank you for all your support dear Somya, Mom, Dad, Bhai, Bhabhi and to all my awesome friends at ASU, wouldn't have been possible without you.”

**Parth P.**

“Thank you, Mom and Dad. I will surely make you proud one day.”

**Kalp P.**

"It's common for grads to be showered with congratulations but the true praise goes to my parents for making it all possible. Love you Mom & Dad."

**Nicholas P.**

"It has been an incredible journey that started with hope and belief and has ended with more knowledge, creativity and pride."

**Harshil P.**

“Thank you, ASU, for everything!! It was the best experience of life. - A Proud \$Un D3viL !!!”

**Vikramaditya P.**

“Thank ya’ll for coming!”

**Korey P.**

“Mom and Dad, thanks for the support in my education. Caitlin, thanks for putting up with all of my antics. I love you all!”

**Cory P.**

"I want to thank all of my family for being there for me over the years, especially my grandfather for all of his engineering support. I love you all."

**Benjamin P.**



"Thanks to my family for your love and support. You have shaped the person I am today, and I can't express how blessed I am to have you all in my life."

**Chelsey P.**



“Thank you, Mom, Dad and Andrew, for the immense amount of support that you’ve given me as I’ve pursued my degree here! I love you all very, very much!”

**Adam P.**

“I want to thank God, my family, my professors and my amazing friends for 4 unbelievable years full of memories and unconditional support!”

**Erick P.**



A photograph of a graduation ceremony at night. The scene is filled with graduates in dark gowns and mortarboards. The background is decorated with numerous yellow and red balloons. Stage lights are visible, creating a festive atmosphere. A large, semi-transparent red banner is overlaid across the middle of the image, containing white text.

**graduation photos. . .**

**[flickr.com/photos/  
fultonengineering](https://www.flickr.com/photos/fultonengineering)**

**IRA A. FULTON SCHOOLS OF  
engineering**

"Thank you to my family,  
Humberto, Cindy, Sia, and  
Tina. Muchas Gracias a mi  
familia."

**Andrew P.**

"Thank you to my friends and family, and especially to my parents, James and Faith, for supporting me in my endeavors."

**Justin P.**



"Special thanks to my family, I couldn't of done it without you. Love you, Darcy, Kelli, Rachael, & Scott."

**Mitchell P.**

"I made it! Thanks, mom and dad, I couldn't have done it without you."

**Jonathan P.**



“Thank you, ASU, Dr. Frakes,  
IPA Lab, friends & family. I  
had the best time ever!”

**Anup P.**

“Thank you Mom (Shanthini), Dad (Raghavan), Prashanth (brother) and Hamsa (sister-in-law). Couldn't have done it without you all!”

**Srinath R.**

“Thanks to my family and friends for always supporting me. Go DEVILS! \m/”

**Gautham R.**

“Thank you to my parents  
and friends for supporting  
me through my college  
education!!!”

**Ivan R.**

"I greatly appreciate the assistance from all my family & friends. You have been a tremendous support to me throughout this time in my life! Thank you!"

**Anthony R.**





"I would like to thank my family for all of their support over the years, especially my parents, Ann and Brian, and my loving husband, Patrick."

**Nicole R.**

“Thank you for everything you have done for me, Mom and Dad. I couldn’t have done anything without you. I love you!”

**Ronald R.**

“Thank you to my wife, Sam,  
for all she has done to help  
get me through! Thank you  
to family and friends!”

**Riky R.**

“Thanks, mom and dad, for all your support! Thanks, Adam, Ben and Heidi for being awesome! And thanks to my friends for making it an amazing experience!”

**Allen R.**

“Thank you to my family and friends for their continued support and encouragement throughout this journey!”

**Kristen R.**

“Thanks to my mother and father for dealing with me all these years and giving me everything I could’ve ever asked for. I promise I won’t let you down!”

**Stevie R.**

"FINALLY!!! Big thank you to my family and friends who've been so supportive the past 4 years. Love, Jayleen"

**Jayleen R.**





“Thank you, Tami, Sarah and Andrew, for your patience, love and support! This never would have happened without you guys. I love you! Next? Disneyland!”

**Jeffrey R.**

“To all my family and friends,  
thank you for all of the  
support! I love you guys!”

**John Michael R.**

"Thank you to my loving wife Lael, and my children Leyani, Milas and Espyn, and all my family for their support through school. Also, thank you Santa."

**James R.**

“Thanks to all my family and friends for all the support! Could not have done this without all of you!”

**Justin R.**

"A big thank you to my friends for making this journey a easy one."

**Subhadip R.**



Management  
Insulin Detection



Murtis B. Cook, MD  
Program, School of Biological and Health  
Sciences, 10 E. Shea Blvd, Scottsdale, AZ 85259

FINAL PRODUCT  
SPECIFICATIONS

PRODUCT ARCHITECTURE

Component	Material	Quantity	Notes
1	...	...	...
2	...	...	...
3	...	...	...
4	...	...	...
5	...	...	...
6	...	...	...
7	...	...	...
8	...	...	...
9	...	...	...
10	...	...	...
11	...	...	...
12	...	...	...
13	...	...	...
14	...	...	...
15	...	...	...
16	...	...	...
17	...	...	...
18	...	...	...
19	...	...	...
20	...	...	...
21	...	...	...
22	...	...	...
23	...	...	...
24	...	...	...
25	...	...	...
26	...	...	...
27	...	...	...
28	...	...	...
29	...	...	...
30	...	...	...
31	...	...	...
32	...	...	...
33	...	...	...
34	...	...	...
35	...	...	...
36	...	...	...
37	...	...	...
38	...	...	...
39	...	...	...
40	...	...	...
41	...	...	...
42	...	...	...
43	...	...	...
44	...	...	...
45	...	...	...
46	...	...	...
47	...	...	...
48	...	...	...
49	...	...	...
50	...	...	...

ASU ASU

"Thank you, Mom and Dad,  
for getting me to where I am  
today and being the best  
parents ever! Thank you  
Shane for always being  
there! I Love You All!!! <3"

**Katherine R.**



"I would like to give a special thanks to my family for all the restless nights they let me give them and support they have given me these four years."

**Adriana R.**



A photograph of a graduation ceremony at night. The scene is filled with graduates in dark gowns and caps, some with yellow tassels. The background is dark, punctuated by bright stage lights and numerous balloons in shades of yellow, red, and pink. A large, semi-transparent red rectangular overlay covers the middle portion of the image, serving as a background for the text.

**twitter. . .**

**#asugrad**

**IRA A. FULTON SCHOOLS OF  
engineering**

“Thank you! Couldn't have done it without you.”

**Carlos S.**

“Thanks to all of my family and friends for their support, especially my parents, Ralph and Irma Sanchez. I love you both.”

**Anthony S.**

“The past 4 years have been awesome! Being an engineer and an NFL Cheerleader was so special! Thanks to all my family and friends for endless support!”

**Samantha S.**

“I would like to thank all of my family, friends and Jaime Sublett for believing in me and keeping me motivated throughout my education at ASU!”

**Ethan S.**

"Special thanks to my wonderful wife and kids who have supported and encouraged me through these trying years. I couldn't have done it without you."

**Cory S.**



"I couldn't have done this without my family, my awesome fiancé Varun, his family and all my friends. Thank you all for believing in me! :)"

**Sandhya S.**



“Thank you to my family and friends and everyone who made this moment possible for every one of us.”

**Ryan S.**

“Mom and Dad, thank you for being so supportive of all my decisions and being there when I needed you most. I love you guys!”

**Richard S.**

“I want to thank my entire family for all of their support and faith in me! I would not be here today if it were not for them! I love you, Mom & Dad!”

**Scarlett S.**

"I would like to thank my professors, friends and family for helping me through this extraordinary journey. GO DEVILS!!!"

**Jared S.**



“Thank you to my family for all your support, without you I would not be standing here today!”

**Todd S.**



“Thank you to my wife, Alex,  
for always being there for  
me! And thank you to my  
mom, Diane, for pushing me  
to always live my dream!”

**Steven S.**

"I would like to thank my parents, my brother and all my friends for their support throughout the last four years."

**Tessy S.**

"Mom and Dad, thank you for all of your support and patience. From you both, I learned the dedication and drive that I needed in order to graduate."

**Michael S.**

"2 years of my life—hued by explorations, inspirations, friendship, coffee & burnt food. For what it has taught me, I am grateful for it. Master's!"

**Priyadharshini S.**

"To all my family and friends  
Thank you for believing in  
me."

**Kimia S.**



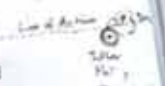
1600  
1000  
500  
0

1000  
500  
0

1000  
500  
0

Brushed-DC motor

V<sub>1</sub> = 1.0 V



Line of Action

1000  
500  
0

5 bar (~75 psi)

“Thank you Mom and Dad for all of the support you’ve given me throughout the past four years!”

**Pankti S.**





"To my parents: 'The future belongs to those who believe in the beauty of their dreams.' Thank you for standing by my side all these years."

**Pratyaksh S.**

"I had a great time at ASU while learning. I thank both ASU and my family for making such a great experience possible in my life."

**Alban S.**

“Thank you to all my family and friends for your continued love and support. This moment is infinitely greater because of you.”

**Jennifer S.**

"The 2 years of my MS journey have been an amazing experience! I have met a lot of new people and had some wonderful times here. Thank you ASU...GO DEVILS"

**Rishabh Manoj S.**

"Thanks to Mom, Dad, Vivek, Devi and Vinod for being constant sources of support, and helping me through my course here. Thanks also to friends at ASU."

**Karthik S.**

“To my parents, whatever I am today is because of you. You are the strength in me. All I will do in my life is to make you proud. Lots of love, Manmeet”

**Manmeet S.**

"I never dreamed about success. I worked for it. Thank you, Mom, Dad and Nate, for the loving support!!! SUN DEVILS FOR LIFE!"

**Mary S.**

“Thank you to all the family and friends that have come to show your undying support for me! I love you all!”

**Lorenzo S.**





“Thank you to my wonderful fiancée Jessica, my parents Sumner and Linda, and everyone else who helped me make it through it all.”

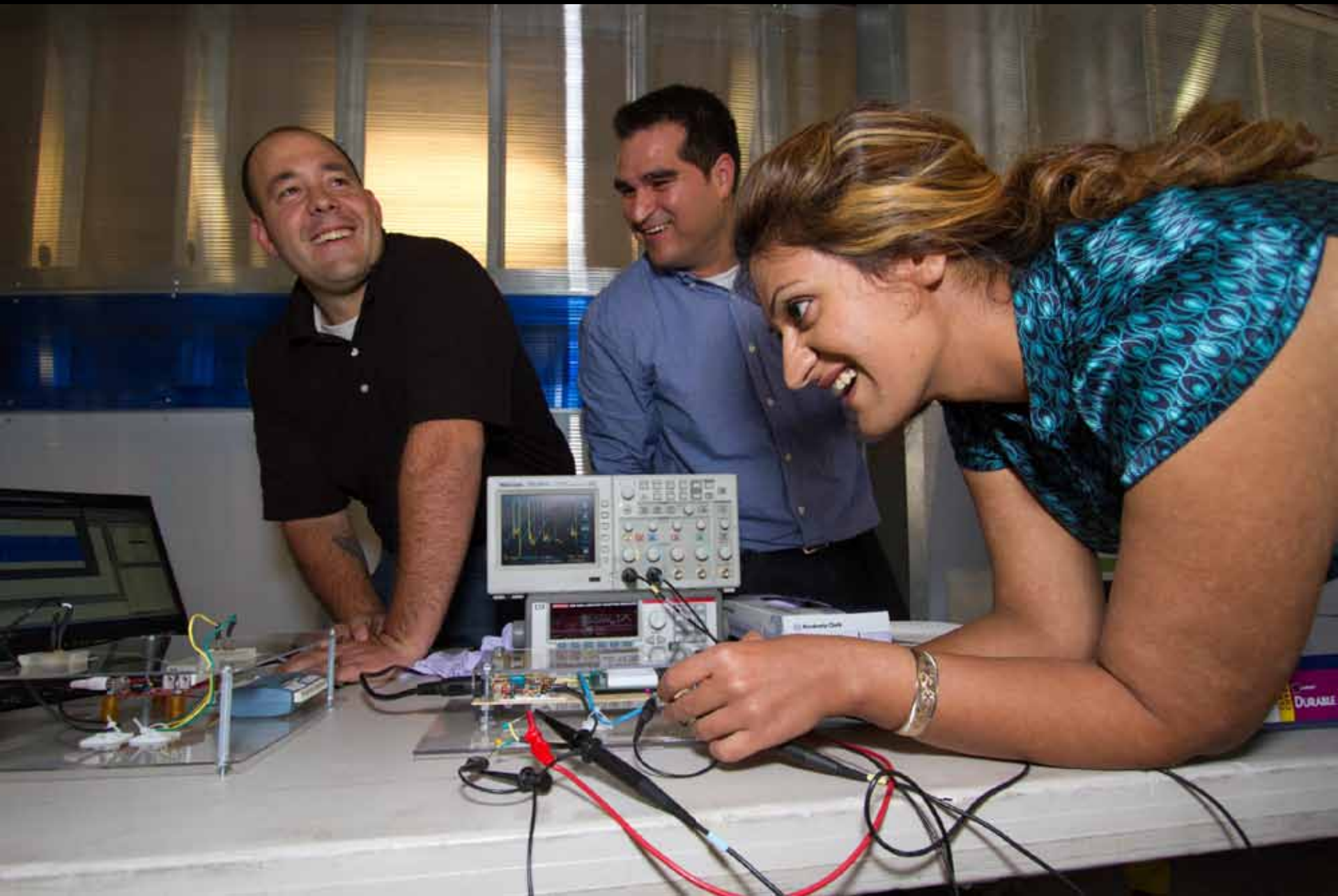
**Joshua S.**

“Seohyun, I love u~”

**Xiaodong S.**

"I would like to thank my wife and daughter for their support in allowing me to achieve my dreams."

**Matthew S.**



"I would like to thank my family and friends who have stood by me during these past five years. Your support has helped me persevere. I love you guys!"

**Angela S.**

“I would like to thank my parents, grandparents, friends and Sigma Alpha Mu brothers. I could not have done it without you all!”

**Daniel S.**

“Thank you, Amma, Appa and Akka. I would not have made it without you!”

**Shashank S.**



"I love you Mom, Dad, Trish,  
Anders and Alek!"

**Abigail S.**



“Thank you Mom and Dad for traveling from Sequim, Washington to celebrate graduation with me!”

**Ty S.**

“Thanks, mom and dad, for all you do! I couldn’t have done it without you!!”

**Samuel S.**



Examination of a Liquid Piston for Isothermal Compression as a

James G. Thompson, Mechanical Engineering  
Arizona State University, Phoenix, AZ  
Research Assistant, "Gradient" and "Bridge"

Research question 2  
How can the process be optimized?

Identification of an optimal method of measuring the rate of the compression process through the use of a liquid piston. The liquid piston is a piston that is used to compress a gas. The liquid piston is used to compress a gas because it is more efficient than a solid piston. The liquid piston is used to compress a gas because it is more efficient than a solid piston. The liquid piston is used to compress a gas because it is more efficient than a solid piston.



ASU

“Thank you, Dad, Mom,  
Grandpa and Grandma, for  
just being there encouraging  
me and being proud of me!”

**Ryan S.**

“Thank you for supporting me through these many years of school!! I really appreciate it and love you all!”

**Amie S.**





A photograph of a graduation ceremony at night. The scene is filled with graduates in dark gowns and mortarboards. The background is decorated with numerous balloons in shades of yellow, red, and pink. Bright stage lights illuminate the scene from above, creating a festive atmosphere. A large, semi-transparent red banner is overlaid across the middle of the image, containing white text.

**graduation photos. . .**

**[flickr.com/photos/  
fultonengineering](https://www.flickr.com/photos/fultonengineering)**

**IRA A. FULTON SCHOOLS OF  
engineering**

"I would like to thank God,  
my parents, brother, aunt and  
friends who have supported  
me through my studies.  
Special thanks to my gal  
friend for the moral support."

**Ramachandran S.**

“Thanks to my dearest family  
and friends for making this  
possible.”

**Jayaraman T.**

“To the greatest parents who taught me the value of education and to my beloved husband who has supported me through this journey, I say THANK YOU!!!!!!”

**Beatrice T.**

“Thank you, my parents. ASU is an amazing university.”

**Boda T.**

"Thank you to my mother for reasons too numerous and too complex to put into words."

**David T.**

“Thanks for the constant love & support in finishing! I made it!! Love you, mom, dad and John! ~Steph”

**Stephanie T.**

“Finally!!!!!!”

**Melinton T.**



“Thank you, Tenorio family, for always supporting me and my education. Your encouragement helped me get here. Thanks!”

**Jorge T.**

"Thanks to everybody who made this possible for me. I am sure going to miss ASU for so many reasons."

**Dawit T.**

"ASU has been the best experience so far, thank you, mom and dad!"

**Ami T.**



"This day would have stayed a dream if it was not for your encouragement and support. Thank you so much, mom and dad. You guys are the BEST. Love you."

**Sowmya T.**

"The days that I really stood for myself, started walking and learned to speak in the journey of education with the language of knowledge."

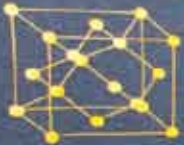
**Akhilesh T.**

"I would like to thank my family for encouraging and supporting me through the rough times, and my friends for making those times a little less rough."

**Michael T.**



Tough as Fd<sub>3</sub>m



### Hip-Leg Prosthesis for Malawian Form...

Site of Malware	Site of...



"Thank you to my wonderful wife, Cassandra, for everything you have done for me over the past 3.5 years! I would not be here today without you."

**Andrew T.**

"My experience at ASU was more than I could have ever imagined; it was an awesome college life. Life at ASU helped me find myself and my passion."

**Gwendolyn T.**

“Thank you, family, for always being there for me and supporting me throughout my academic career.”

**Patrick T.**

"I couldn't have done this without my family. A special thank you to my parents, Jayne, Rob and Leonard."

**Nicole T.**



“Thank you to my parents,  
family, and friends for all of  
your support. I could not have  
done it with you!”

**Blake T.**

“Thank you, ASU! With your help I have gained the necessary knowledge to help me succeed in today's market!”

**Raymond T.**

“Family - thanks for all your love and support! Eliza - you are the best wife ever, I love you, and I can't wait to be a dad!”

**Dallyn U.**



“Thank you to all of my family and friends for supporting me throughout college. You guys rock!”

**Benjamin U.**

“Shout out to all the shrimps.”

**Michael V.**

"Thanks, Mom & Dad, could  
not have done it without you!  
Love you!"

**Alex V.**

“Thank you for your love and support.”

**Sunit V.**

"THANK YOU FAMILY!  
YOUR SUPPORT MEANS  
EVERYTHING! GO  
DEVILS!"

**Michael V.**



“Thank you, dad & mom, I get my master’s degree today as you wished. I shall spare no effort to work & study hard in the future and never disappoint you.”

**Xinqi W.**

"This is Arthur. Nethen, Alvin, Shuyun, Chi, Yu-Hsiu, Chen-chunHong, XiaoMei Ma and many many friends, I love you and good luck to all. Love you, mom and dad."

**Kuo-Chen W.**



"I always value your advice,  
so please never stop giving  
it!"

**Ashley W.**

"Family, thank you for always being there for me. I love you all so much! Phase 1 of "Plan Vacation Home in Hawaii" complete. Love, Punkin Noodle"

**Michael W.**

“Mom and Dad, it has been one crazy ride here in Arizona. I most certainly couldn’t have done it without the love and support you gave me. Thank you!”

**Jessica W.**



"I learned lots here. I thank my family for support and encouragement, my friends for keeping me sane, and my teammates for going into battle with me. MW13"

**Matthew W.**

“Thank you to my family and friends who have supported me through this journey. I could not have done it without you all!”

**Alicia W.**



"Thank you, all the people  
have helped me, my friends  
and my family, especially my  
Dad and Mom."

**Shao-Chun W.**



"Thanks to my father and mother, you are really my heroes."

**Peng W.**

“To my classmate, friend and  
husband Felix Cheng:  
Thanks so much for always  
being here. I love you!”

**Mingjun X.**

"So much thanks to my dear parents, YIFENG XU and XIAOHONG QIU. Thank you all for always on my back. I'm so proud to be your son. LOVE U ALL!"

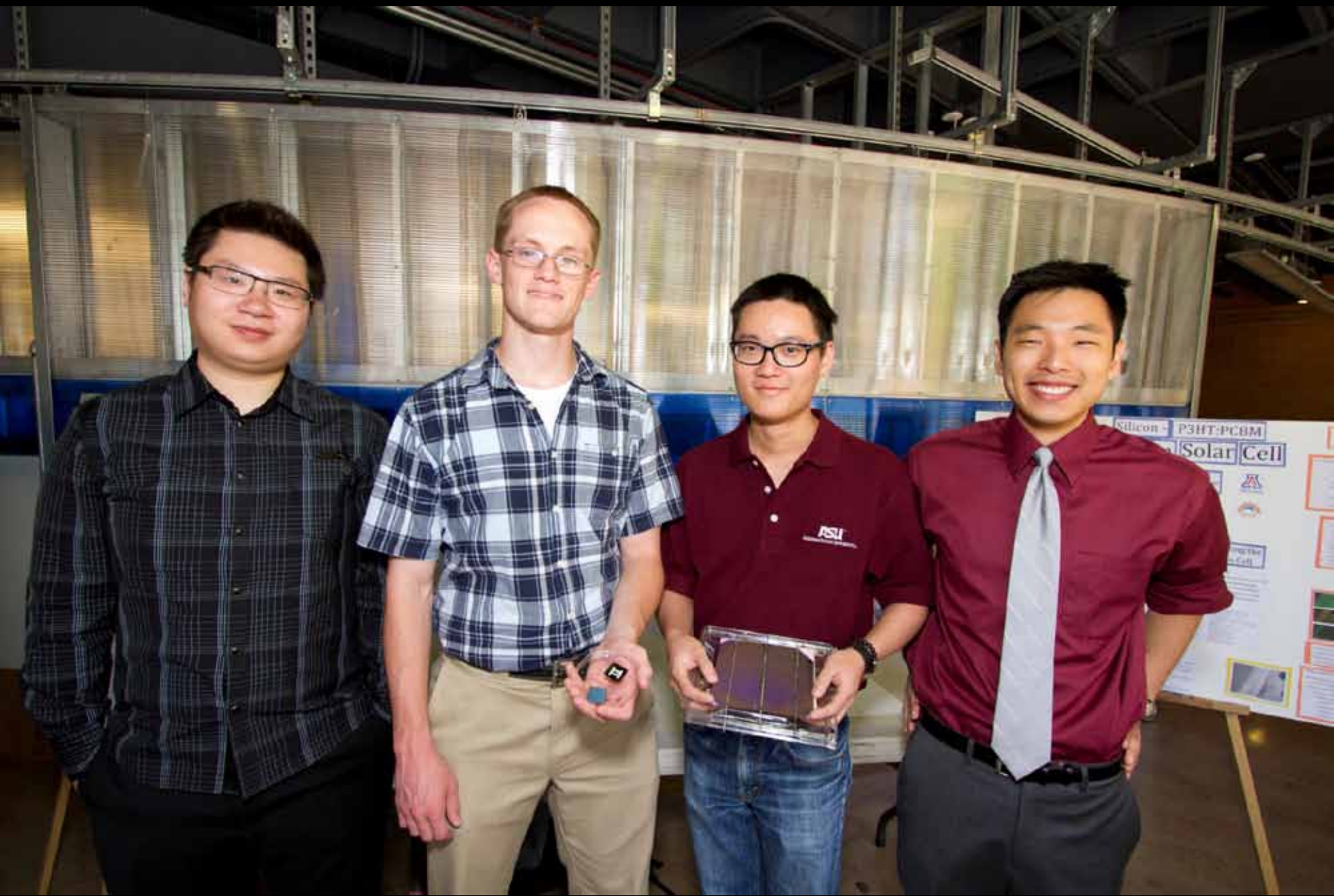
**Chenxi X.**

"I am so happy that you are here Yusuf Ziya Yamak!"

**Didem Y.**

“Nobody is coming to see  
me. #foreveralone”

**Tze Y.**



"I would like to thank Ms. Yazzie for being by my side. I Love You! To my family and friends, thanks for the support and help. WE DID IT!! BRAZIE\_4\_LIFE"

**Sylvester Y.**

"To my loving wife, my parents and my parents-in-law, thank you for your never ending care and support every step of the way."

**Lei Y.**



"Love you, father and mother.  
Love the sunshine here."

**Ming Z.**

“Thank my family and friends  
for their support.”

**Zhao Z.**

"It is the heart for truth who lead me here, and it is the TRUTH who helped me to know my heart. Thanks, to my parents and Arizona State University."

**Wenlong Z.**

“Thank you to my family and to my husband, Nick, for supporting me through degree after degree after degree. I love you!”

**Christine Z.**



**don't forget to write. . .**

**fullcircle.asu.edu**

**the engineering alumni magazine**

**IRA A. FULTON SCHOOLS OF  
engineering**

# **sustainability commencement program**

Arizona State University continually demonstrates its dedication to efficiency, technology and sustainability. The full University Commencement program is being made available to graduates on a reusable external flash drive that will be handed to each graduate after crossing the stage.

This change aligns with our growing institutional efforts to enhance sustainability practices, and our broader endeavors to employ technology in heightened service to our students.

The reusable external flash drive, combined with the abridged program provided as a part of today's ceremony, will yield a four million page reduction in the amount of printed materials distributed at ceremonies over the days of graduation celebrations on all of our campuses.

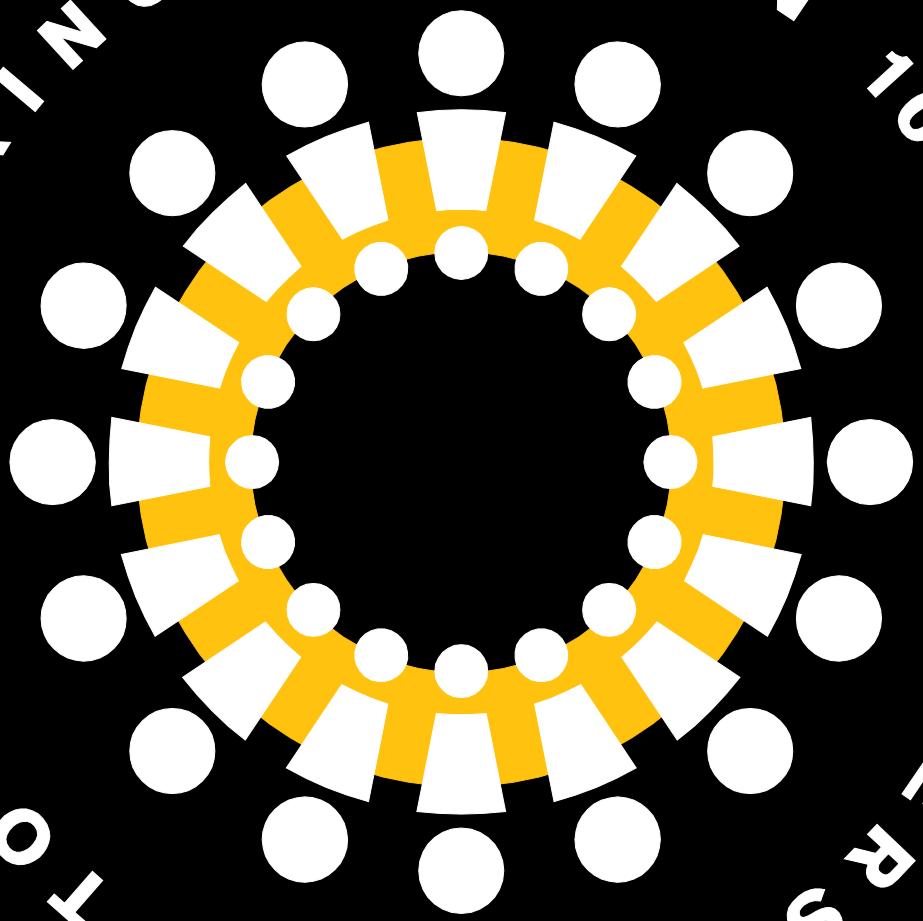


**ASU**<sup>®</sup> Ira A. Fulton  
Schools of Engineering

---

ARIZONA STATE UNIVERSITY

**ENGINEERING FULTON 10TH ANNIVERSARY GIFT TO**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"So many lives have been positively affected by the legacy you left! Thank you for allowing me to be a part of history today. We will keep the flag flying."

**Onyekachi Chiadikobi A.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Mr. Fulton thank you for all your support to the ASU engineering community!!!”

**Matthew A.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Mr. Fulton, your generosity to the Schools of Engineering has given students programs that would not have been possible without your help. Thank you!”

**Now Bahar A.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for providing for a wonderful school of engineering. It has been a challenging, but good journey."

**Heba A.**



## Celebrating 10 years as the **Ira A. Fulton Schools of Engineering**

"Mr. Fulton, without your generous support, all those engineers would be couch potatoes... :)"

**Salem A.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton"

**Mohammed A.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton"

**Abdulaziz A-K.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton"

**Abdulaziz A.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton. I've been proud to be apart of this school from the start! It has truly helped me to grow as an individual."

**Michael A.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton. I really want to thank you for the computer labs and the video recording in classes."

**Karthik Nellian A.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for your commitment  
to the importance of  
engineering."

**Michael A.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for providing so many opportunities! Opportunities of involvement, growth, experience, knowledge and personal development."

**Jason B.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I am leaving the Schools of Engineering with all of the skills I will need to be successful as a graduate. I want to thank you for the experience."

**Benjamin B.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for your generous sponsorship of ASU's Schools of Engineering. We are all grateful for your contributions."

**Vincent B.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton. I hope to be as successful (and rich ;) ) as you are some day."

**Shreyas B.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"The opportunities I've been given and the experiences I've had, have all led up to this moment. Thank you! I promise to help change the world."

**Bronwyn B.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"To our benefactor, Mr. Fulton,  
who has provided the means for  
students, like myself, to graduate  
as engineers this day, thank you."

**Erik B.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for providing me the opportunity to attend this great school."

**Matthew B.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I am grateful for all you have  
done for this university."

**Joseph B.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Hi, Mr. Fulton, thank you for supporting my research during my undergrad. You are the reason why I pursued my M.S. degree!"

**Taylor B.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks, the school is awesome."

**John C.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, your continued support of the FURI program has given me so much I would never have been able to experience on my own. Rock on."

**Matthew C.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you!"

**Craig C.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“I had an amazing time at ASU with lots of sweet memories with friends, family, professors and other staff. Thanks for making it amazing! :)”

**Supriya C.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for providing us excellent facilities for nurturing our growth as engineering students."

**Pranav C.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for the possibilities  
you gave to us, and the wisdom  
you shared."

**Carrie C.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton! Thank you so much for all your efforts to make this school of engineering the best possible."

**Luis Antonio D.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for your  
continuous support to ASU!"

**Kevin D.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for providing an  
experience and education to  
remember."

**Jonathan D.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton."

**Lance D.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton - Thank you for the opportunity to study civil engineering here at Arizona State. It has been an honor."

**Travis D.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for supporting such a fantastic school and letting us all have such a wonderful education. Also thank you for FURI!!"

**Erica E.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for enabling such a wonderful and truly life-changing engineering program."

**James F.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, thank you so much  
for everything!"

**Darcy F.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for supporting me through my years as ASU. I am truly grateful for your generosity."

**Nathan G.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, thank you for being such a great role model for all of us!"

**Divya G-N.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks, Mr. Fulton! I am a proud master's degree holder because of you!"

**Priyadarshini G.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I had the chance to meet you this semester through FURI. You are an amazing man and I will be forever thankful for your support in ASU Engineering."

**Anthony G.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you so much, Mr. Fulton.  
Your support has made my  
education possible."

**Marian G.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks for the best 4 years of my life! Fulton Schools of Engineering will always hold a special place in my heart."

**Neekta H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for  
making everything possible."

**Joseph H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for making a great school."

**Jared H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Mr. Fulton, thank you so much for being a benefactor to the Schools of Engineering. Your contributions have helped students achieve their dreams!”

**Shawn H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, thank you for all that you have done for the Schools of Engineering. As a FURI and 4+1 student, I thank you for all the opportunities."

**Nicholas H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, thank you for your generosity and continual support of our college. I hope to meet you one day to thank you personally!"

**Mario H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for providing such a great program to prepare me for the engineering industry. I am confident that I will succeed and do well."

**Michael H.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for helping establish the Schools of Engineering at ASU. Your support has allowed me to pursue a good education and career."

**Casey H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for all the  
opportunities your school has  
made available to me!"

**Caroline H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for your contributions and making the engineering school a great place to get a high class and quality education."

**Kenneth H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for establishing this school of engineering. Your generous contributions have helped thousands of students achieve their dreams!"

**Wesley H.**



**thank you, Mr. Fulton** Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Thank you, Mr. Fulton, for your generosity in supporting and funding CS students & making my educational experience beneficial and inspiring.”

**Sandra H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Your dedication to excellence and your support of this outstanding program is much appreciated!"

**Sebastian H.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for giving me the opportunity to improve myself for better future."

**Qazi I.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton"

**Sanjeev Kumar J.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for giving me this opportunity to be part of ASU!!!"

**Dinu J.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I had a wonderful experience  
studying engineering at ASU.  
Thank you!"

**Sam J.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks, Mr. Fulton!"

**Nathan K.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks, Mr. Fulton. The Ira A.  
Fulton Schools of Engineering is  
AWESOME :D"

**Srinag K.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for supporting such an amazing program, and allowing students of all kinds the opportunity to seek out and achieve their dreams."

**Zachary K.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks for the kind donations  
and enthusiasm."

**Raghavendra K.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Thank you, Mr. Fulton, for making it possible to learn the concepts of engineering design and development at ASU.”

**Jane L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton."

**Juan L.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks for funding FURI. I am grateful for the experience I gained through the program."

**Arad L.-K.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Thank you, Mr. Fulton, for the chance to challenge myself and benefit the betterment of my future!”

**Ryan L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks, Mr. Fulton!"

**Loren L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"The programs that bear your name brought me here; I participated in them; I am better for it. Future, here we come! Thank you, Mr. Fulton!"

**Eric L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for all of your educational support. It means a lot to have someone who is so present and enjoys getting to know the students."

**Kristin L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I would like to thank you, Mr. Fulton, for making college education accessible to many students across the valley."

**Jackson L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Thank you!!!”

**Mengren L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks, Mr. Fulton, and  
Meowwwwwww"

**Andrew L.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Engineering school is so great!  
Thank you, Mr. Fulton!"

**Yu L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I'm starting my professional engineering career thanks in part to your generous donations. Thanks for helping make my aspirations come true!"

**Alexander L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for  
investing in the future."

**Suyana L.-G.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"This slide only allows for 150 characters, which is not enough to express my gratitude for making school just a little bit less expensive for us grads."

**Patrick L.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for being the reason behind such a world-class educational institution."

**Prashanth M.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, thank you for making engineering such a strong program at a state university. It is life-changing."

**Beth M.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Sir"

**Omkar Anilrao M.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you very much, Mr.  
Fulton!"

**Munaf M.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for helping fund the school that's providing the world with the world's next scientists and engineers."

**Christopher M.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for the wonderful experience that thousands of students enjoy in this school!"

**Darshana M.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for your support as well as your continued investment in future engineers!"

**Kyle M.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Del Webb would not have survived without the help of Mr. Fulton. I am so appreciative for my education and I would not have chosen any other school!”

**Kristin M.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for this rewarding  
experience of grad school."

**Deepak M.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you so much for  
everything."

**Pramit N.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Sir, for creating such  
an awesome school."

**Madhur Sunil N.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you!"

**Karthikeyan N.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for the wonderful  
opportunity, Mr. Fulton."

**Matthew O.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton! And thanks for the opportunity that FURI provided!"

**Gerald O.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"KEEP IT FRESH, IRA!"

**James P.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanking you for your generous support that has helped me craft my career."

**Harshil P.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, It's been a pleasure being a part of the school of engineering these past few years. Thank you."

**Korey P.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, thank you for all that you have done to make my learning experience top notch. Best wishes to you and your family."

**Benjamin P.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for the opportunity to further my education and skillset through the use of the college of engineering here at ASU!"

**Adam P.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, sir."

**Andrew P.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I would like to thank Mr. Fulton for his contributions to the university, which assist in scientific advancements through research."

**Nicole R.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for being so involved in the Engineering Schools. Your passion and desire to see us excel is such a blessing."

**Austin R.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Thank you, Mr. Fulton, for providing me with an education and a foundation for me to start the rest of my life. I feel very lucky! Thank you again!”

**Katherine R.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for the time and resources you have committed to the ASU Schools of Engineering. I have enjoyed my time here as an engineering student."

**Adriana R.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for all your support,  
Mr. Fulton, and the opportunities  
that you provide for ASU  
engineering students every day."

**Anthony S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for creating an ideal environment for learning, growth, fun and engineering. It has made for such an enjoyable experience."

**Samantha S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton."

**Ryan S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for supporting ASU and allowing me have the opportunity to complete research and excel within the engineering school."

**Jared S.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I have been a part-time student over the last ten years, and in my time you have been our benefactor of unwavering support. Thank you, Mr. Fulton."

**Michael S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for your contribution  
in our lives. I will always  
remember getting lost in Wells  
Fargo stadium with you."

**Kimia S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for all of the opportunities you have provided me here including things like the FURI program!"

**Pankti S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I heard you speak at an event about your attitude towards life and success and it inspired me to do great things with mine. Thank you, Mr. Fulton!"

**Alban S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for this great school that you support and for the opportunity that you provide for so many young and ambitious minds!"

**Rishabh Manoj S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you Mr. Fulton! If you are here, you are awesome!"

**Mary S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, your support and generosity to engineering and higher education are truly inspiring. You have my sincerest thanks and best wishes."

**Lorenzo S.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks for your support and for making this experience possible!"

**Samuel S.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton"

**Jayaraman T.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thanks to Mr. Fulton for continually supporting the Schools of Engineering and giving me this opportunity to broaden my knowledge and expertise."

**Beatrice T.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton—you are the best!"

**Stephanie T.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for supporting our school and our future. We'll be sure to make you and ASU proud."

**Jorge T.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I am immensely grateful for Mr. Fulton and his support for ASU. It is being the cause for thousands to get the best education in engineering."

**Akhilesh T.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, it would not be possible for me to be here today graduating with this degree if it were not for you and your support."

**Michael T.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for all that you have done for the Schools of Engineering. I am honored to have studied in a top engineering program."

**Gwendolyn T.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for making the school of engineering, as we know it, possible for us to improve ourselves and our future."

**Patrick T.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton! Your generosity to ASU has greatly impacted my future for the better!"

**Raymond T.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I want to thank Mr. Fulton for the opportunity he provides aspiring engineers, especially through the FURI program. He is legendary!"

**Michael V.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you for encouraging me  
to chase my dream with full  
passion."

**Sunit V.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, thanks! Without your school's support, I wouldn't be here today!"

**Michael V.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for the best chance you gave us to improve ourselves in such great environment."

**Xinqi W.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"You have helped give me a  
future! Thank you, Mr. Fulton!"

**Ashley W.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Mr. Fulton, thank you for giving me the opportunity to attend your school here at Arizona State University. Your support is very much appreciated."

**Jessica W.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, sir, it is a great  
college!"

**Matthew W.**





Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"I would like to thank Mr. Fulton for accepting me and the professors for guiding me."

**Sylvester Y.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton, for giving me the opportunity to receive an education that will be my lifelong asset."

**Lei Y.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Dear Mr. Fulton, thank you for your contribution to the Schools of Engineering. I enjoyed my studies here very much."

**Meiying Z.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

“Cheers for the great efforts and help from Mr. Fulton. God bless you!”

**Wenlong Z.**



Celebrating 10 years as the  
**Ira A. Fulton Schools of Engineering**

"Thank you, Mr. Fulton. As I finish ASU engineering degree number three, I owe you more than most."

**Christine Z.**

A photograph of a graduation ceremony at night. The scene is filled with graduates in dark gowns and caps, some with yellow tassels. The background is dark, punctuated by numerous yellow and red balloons hanging from a metal truss structure. Bright stage lights illuminate the scene, creating a festive atmosphere. A semi-transparent maroon banner is overlaid across the middle of the image, containing white text.

**view all grad messages  
online. . .**

**[engineering.asu.edu](http://engineering.asu.edu)**

**IRA A. FULTON SCHOOLS OF  
engineering**

**ASU**<sup>®</sup> Ira A. Fulton  
Schools of Engineering

---

ARIZONA STATE UNIVERSITY