Dear graduates,

On behalf of the faculty and staff of the Department of Electrical and Computer Engineering, I am thrilled to extend my heartfelt congratulations to each and every one of you on your graduation. You have successfully navigated college life, from late-night study sessions and challenging exams to the joys of new friendships and unforgettable experiences. Your hard work, dedication and perseverance have brought you to this momentous occasion, and I am incredibly proud of you all.

Graduation marks a time of celebration, reflection and transition. It is a moment of joy and pride to celebrate the culmination of years of studying and pushing yourself to new heights. It is also a time to look back on all that you have accomplished and look forward to the exciting opportunities that await. As you embark on your next chapter, I offer some words of advice.

First and foremost, remember that the journey does not end here. Your degree is a testament to your knowledge, skills and dedication, and a key that unlocks countless doors for you to make a difference in people’s lives.

Secondly, don’t be afraid to take risks and keep pursuing your passions. Whether you choose to enter the workforce, further your education, or start a business, always remember that the only limit to what you can achieve is your own imagination.

Thirdly, stay connected with your alma mater. Our doors are always open, and we are here to support you and celebrate your successes. We would like to be a part of your journey as you continue to make a positive impact on the world.

Finally, I want to acknowledge the support you have received from your families, friends and loved ones throughout your academic journey. Their encouragement and love have undoubtedly played a significant role in your success, and I am sure they are equally proud of your accomplishments.

Congratulations again! You have earned this moment. I wish you all the best in your future endeavors and look forward to seeing all the amazing things you will accomplish in the years to come.

Bear Down!

Sincerely,

Michael Wu
PhD, FIEEE
Professor and Department Head
Electrical and Computer Engineering

---

### TABLE OF CONTENTS
3 Congratulatory Message
4 Awards and Acknowledgements
6 Bachelor of Science Degree
10 Master of Science Degree
12 Doctor of Philosophy Degree
14 Class of 2023 Remarks
22 ECE Memories
26 Faculty & Staff Remarks
30 Core Faculty
AWARDS AND ACKNOWLEDGEMENTS

Outstanding ECE Students

Each semester, the College of Engineering honors outstanding students who are nominated by their professors and department heads.

Outstanding Senior
Elliot Zuercher

Outstanding Graduate Student
Lavanya Umapathy

Outstanding Student Achievement
Chris Bremser

Outstanding Graduate Teaching Assistants
Yuchao Liao
Milad Taghipour
Jiahao Tang

Awards for Excellent Performance at the Student Interface

The annual Student Interface Awards for Excellence honor ECE faculty, staff and teaching assistants who support our students by making them feel they are essential and valued members of the university community.

Outstanding Graduate Teaching Assistant
Maisha Hafiz

Outstanding Staff
Alexis Vasquez
Undergraduate Academic Advisor

Outstanding Faculty
Dale Hetherington
Professor of Practice

Outstanding Faculty
Hal S. Tharp
Associate Department Head
Associate Professor

ECE Engineering Ambassadors

Engineering Ambassadors share information about the College and their passion for Engineering – all from a student’s perspective. They are chosen based on their outstanding academic performance, involvement in research and internships, leadership experiences, and enthusiasm for engineering and education.

Alex Hillman
Major(s): Electrical and Computer Engineering
Minor(s): Mathematics
Hometown: Blythe, California (Palo Verde High School)
Undergraduate highlights:
- Student Researcher under Dr. Adegbija
- Cochise Residence Hall Desk Assistant
- Physics II Preceptor
- Internship at Intel Corporation
Plans after graduation: Alex will be working in industry as a Design Engineer with Microchip Technology in Chandler, AZ.

Katherine Patterson
Major(s): Electrical and Computer Engineering
Minor(s): Mathematics
Hometown: Cave Creek, Arizona (Horizon High School)
Undergraduate Highlights:
- Blue Chip Leadership Member
- PACT Cybersecurity Researcher
- Greek Life
- Internship with Raytheon Missiles and Defense
Plans after graduation: Katherine plans on attending Colorado State University to pursue a Masters of Science in Computer Science.

Collin Preszler
Major(s): Electrical and Computer Engineering, Biomedical Engineering
Hometown: Peoria, Arizona (BASIS High School, Peoria)
Undergraduate highlights:
- Medical Device Club President
- Biomedical Engineering Society President
- Biomedical Undergraduate Mentor
- Tau Beta Pi Arizona Chapter Member
- Student Researcher under Dr. Elizabeth Hutchinson (MSBIL)
- Student Research under Dr. Gutruf (Gutruf Lab)
- Undergraduate Learning Assistant (ULA)
Plans after graduation: Collin plans to attend the University of Pittsburgh on track to obtain his PhD in Bioengineering with an emphasis on Neural Engineering.

Bianca Rodriguez
Major(s): Electrical and Computer Engineering
Minor(s): Mathematics
Hometown: Tucson, Arizona (University High School)
Undergraduate Highlights:
- Internship at Raytheon Technologies
- Tau Beta Pi Executive Vice President
- Society of Women Engineers (SWE) Member
Plans after graduation: Bianca will work in industry as a Computer Engineer with Raytheon Technologies in Tucson, AZ. Bianca hopes to pursue a Master of Science in Electrical and Computer Engineering and to work with Artificial Intelligence.
BACHELOR OF SCIENCE DEGREE

A
Ali H A S H A laqeel
Haley Renee Alden
Jesus Arias

B
Ismael Gustavo Ballesteros
Nicolas Ethan Blanchard
Christopher William Bremser
Noah Talmage Butler

C
Gavin M. Caldwell
Thomas Michael Carroll
Yousuf Choudhary
Rahul Chowdhary
Elizabeth M. Connacher
Christian Copic
Nicolas Ramon Cornejo-Lopez
Riley Brennan Cowling
Konner A. Curtis

D
Isabel Mary Dailey

E
Ahmad Ashraf Eladawy
Gwendolyn Moira Etson

F
Garrett Austin Fenderson
Ruben Diego Fuentes Gutierrez
James Ryan Fulton

G
Kevin Dennis Gilman
Brian James Glaser
Keegan Daniel Godfrey
Roman P. Golota
Kevin Sean Grady
Sidhant Gulati
Nicholas Anthony Gullo

H
Carson James Hayes
Colin Mark Herbert
Alex J. Hillman
Kathryn T. Hoang
Kuang Ting Hsueh

I
Bryce Hayato Johnson
Quentin N. Johnson

J
Nafisul Huq Khondaker
Jacob Michael Klonsinski
Jerome Anthony Klosterman II
Jesse R. Koontz
Tony Franck Koulong Tanga
Casey J. Kozlowski

K
John Paul LaRue
Michael Salvatore Lauria

L
Shane Michael Lawler
Timmy Thanh Le
Raphael Lepercq
Yu-wei Liao
Alan Manuel Loreto Corindez

M
Jia Cheng Ma
Son Tran Thien Mac
Lucca Ouriques Magalhaes
Guransh S. Mann
Salman Abdulsalam Marafie
Cameron Matsumoto
David Chibuikem Mazi
Megan Faith Mickey
Tyler Stephen Monlux

N
Aryaman Nath
Joy Niu
Sebastian Alexander Oviedo
Katherine Elizabeth Patterson
Aidan Mark Choe Petrie
Ethan Lance Potthoff
Ryan Michael Prather
Collin Alexander Preszler
Madeline Loveday Procter
Rusty D. Rinehart
Bianca Maria Rodriguez
Ashton B. Rowe
Cameron James Sexton
Timor Shahin
Nicholas J. Smith
Addison James Sterner
Efrain Abel Torres
Christopher T. Westerhoff
Jackson Wyatt Wood
Evan Wright
Sheehab Mahdi Zaman
Zhehao Zhang
Elliot Zuercher
REYA JIJI ABRAHAM
MURAD MEHRAB ABRAR
AUSTIN JOE ALOWAY
TYLER AVERETT
MICHAEL E. AYALA

JONATHAN DALTON BENSMAAN
TRENT BOICE
ALEXIS BOONE
ANDREW B. BURNS

JARED PAUL CAUSEY
KAITLYN CHRISTENSEN
ANDREW CLARK

KATHERINE KAYLENE DAILY
DEBOTTAMA DAS
PARKER DATTLIO
BRENDA DICOCEA

ALEXANDER FUSCO
G
JONATHAN GATES
ERIC ELLIS GLYNN
ANANT VITHAL GOGATES
H
JONATHAN GILBERT HERRERA
CHANEL HILL
I
RAIAN ISLAM
J
CELYN THOMAS JACOBS
RICHELLE ROSE IGCASENZA JAVIER
KURT JOINER JEIKOWSKI
JEFFIN GEORGE JOHNSON
KYLE WILLIAM JOHNSON
K
STEPHEN PATRICK KEEHAN
LEWIS WILLIAM KOPLON
DUSTY J. KUBAN
L
ALLEN MATTHEW LAFFERTY
ERIC MARCOS LAWSON

HWA LEE
DE’MAUREE LEGAIRE LOGAN
KYLE MAURICE LOWE
HARRISON LUBBERS
M
Tiffany Tinkyee Ma
Matthew Martin
Karla Eloisa Montano
Diego Alejandro Montano
Diego Moscoso
Kevin Murray Jr.

DEREK JAMES NIELSEN

CARL YUTA PEART
CHARLES C. PENNY
JOAQUIN EDUARDO PESQUEIRA
TERESA THUYTIENTH PHAM
R
MOHAMMAD WALI-UR-RAHMAN
NATHANIEL RODRIGUEZ
S
ANTHONY IGNATIUS SCHLECHT

CHRISTOPHER SCHULTZE
DEVIN TYLER SHOULTS
JOHN SIAHAAN
MICAH SIEGLAFF
RYAN PAUL STANCLIFFE

ALEXANDRIA TAILA
KEVAN MICHAEL TAVASOLI
SCOTT THOESEN
JARED SCOTT TURNER

ANDREA CELESTE VILLASENOR

QI WEN
BENJAMIN CARL WICHMANN
AARON T. WINKLE
TYLER RAY WONG
JOSHUA WU

ELI ALEXANDER ZERVIGON
BRADLEY M. ZIMMERMANN
DOCTOR OF PHILOSOPHY DEGREE

G
Dhruv Mayur Gajaria

M
Mohammad Sadegh Majdi

S
Shalaka Satam

Z
Yiming Zhang

L
SeungHyun Lee

R
Arash Roshanineshat

U
Lavanya Umapathy

Ahmed Mahmoud Salama Ziane
The following degree recipients have shared their photos and personal statements.

**BACHELOR OF SCIENCE**

**Christopher Bremser**
I have been a member of this college for 5 years. In that time my mother, father, friends, sister have all passed away and I have been kicked out of the college. I fought my way back, I created the ECE Discord and revived the IEEE Club again. This college has been the source of long days and stressful months. I have built a community around me that will forever follow me. Even through all the tragedy, every time life kicked me down I got back up swinging. Thank you ECE Department.
Accepted a position with Apple Computers in Cupertino, CA.

**Isabel Dailey**
I’d like to thank my parents and sister for always supporting me in my academic and personal endeavors. Their continuing support has allowed me to truly “age phenomenally.” I wouldn’t be who and where I am today without them! I’d also like to thank my friends for making me laugh every day and giving me some of the most memorable moments of my college years.

“I have aged phenomenally.”
- LEGO Batman
Working for NASA on the CCRS mission, Goddard Space Flight Center, Greenbelt, MD.

**Ruben Diego Fuentes Gutierrez**
Accepted a hardware engineer position at Microsoft Corporation in Redmond, WA.

**Christian Copic**
“Success is not final, failure is not fatal: it is the courage to continue that counts.” - Winston Churchill
Accepted a silicon engineering internship at Microsoft in Hillsboro, OR. Pursuing an MS degree in ECE at UArizona.

**Kathryn Hoang**
Thank you to my friends and family for all the love and endless support you have provided me these past four years. I am so grateful for the opportunity to learn and expand my knowledge. I could not have done it without you!
Accepted a position at Raytheon Technologies in Tucson.

**Riley Cowling**
Pursuing an MS degree at UArizona.

**Sidhant Gulati**
“Nothing makes an Engineer more productive than the last minute.”
Pursuing an MS degree in ECE at Georgia Institute of Technology in Fall 2023.

**Ahmad Eladawy**
“Always be guided by the light of knowledge and wisdom to shape your future, the future of your country, and the future of the world.” - Ahmad Zewail
Accepted a position at Lutron Electronics in Philadelphia, PA.

**Garrett Fenderson**
Accepted a position with Raytheon Technologies in Tucson.

**Brian Glaser**
“Do not be afraid. Do not be satisfied with mediocrity. Put out into the deep and let down your nets for a catch.”
- Pope John Paul II

**Alex Hillman**
“Reason is the slave of passion.” - Fyodor Dostoyevsky
Accepted a position at Microchip Technology in Chandler, AZ.

**Colin Herbert**
I am so grateful to have furthered my education here at the U of A. I want to thank all of my friends and family for their constant love and support through the ups and downs of college life. I have grown immensely as a person and in my faith, and I am ready to take on whatever comes next for me.
“I love this place” - Alec Bohm, 2022 Philadelphia Phillies
Accepted a position at Aerialsphere LLC in Phoenix.
CLASS OF 2023 REMARKS

Kuang Ting Hsueh
I am grateful for the opportunities, experiences, and support that have led me to this moment. Thank you to my family, friends, and teachers for their encouragement and guidance.

Tony Koulong Tanga
What a ride it was! I first want to thank the Lord Jesus for protecting me, leading me and always being there for me during these last 4 years. I am truly grateful for everything I have been through. I want to thank my mother for always being there by my side and encouraging me no matter what. I want to thank my late father for the wise words he had for my life and today I can say that I did it. I also want to thank all the rest of my family, friends and classmates for making this possible.

Planning to pursue an MSE/MBA in electrical engineering at ASU.

Tim Le
Accepted a position at Raytheon Technologies in Tucson.

Alan Loreto Cornidez
“Blessed is the one who finds wisdom, and the one who gets understanding, for the gain from her is better than gain from silver and her profit better than gold. She is more precious than jewels, and nothing you desire can compare with her. Long life is in her right hand; in her left hand are riches and honor. Her ways are ways of pleasantness, and all her paths are peace. She is a tree of life to those who lay hold of her; those who hold her fast are called blessed.” - Proverbs 3: 13 - 18 (ESV)

Pursuing a graduate degree at UArizona.

Son Mac
My time at UArizona has been unforgettable. It feels like only yesterday that I walked around campus for the first time and now graduation is already here. After countless ups and downs, I’m grateful to have made it here and I want to express my appreciation to my loved ones and fellow engineering students who have accompanied me on this journey. I’m excited to see what the future holds. Bear Down!

“As you go, go further. The best is yet to come.” - The University of Arizona Department of Electrical and Computer Engineering

Aryaman Nath
A shoutout to the team at IEEE for getting me here. Chris, Rusty, David, Jeremy, and Calvin y’all are incredible people. Looking forward to seeing where everyone goes from here!

Accepted a position at Raytheon Technologies in Tucson.

David Mazi
It’s true what they say, you ‘gotta let college pass through you as much as you pass through it. Also, you only have as much time as you let yourself have. You do have time to accomplish what you want. One more thing, no one is an island, socially and academically.

Ethan Potthoff
“Quit, don’t quit... Noodles, don’t noodles... You are too concerned about what was and what will be. There is a saying: yesterday is history, tomorrow is a mystery, but today is a gift. That is why it is called the present.” - Master Oogway

Pursuing an MS degree in ECE at UArizona.

Ryan Prather
“Life moves pretty fast. If you don’t stop and look around once in a while, you could miss it” – Ferris Bueller

Accepted a position at Raytheon Technologies in Tucson.

Bianca Rodriguez
I would like to thank my family and friends for supporting me through this amazing and enriching journey. I am proud to say I will be working at Raytheon as an official computer engineer! Si Se Puedo!

Accepted a position at Raytheon Technologies in Tucson.

Collin Preszler
Resistance is not futile. It’s voltage divided by current.

Pursuing a PhD in bioengineering at the University of Pittsburgh.

Madeline Procter
Accepted a position at Raytheon Technologies in Tucson.

Rusty Rinehart
While my degree may only have my name on it, I have a whole team of support behind me that got me to this moment. Thank you to all my friends, family, professors and employers. I’d also like to give a special shoutout to Chris Bremer and the IEEE Student Branch. It took endless hours of work, but we successfully united the ECE college again after the pandemic with our Discord server and rebuilding IEEE!

Accepted a position at Intel Corporation in Austin, TX.

Son Mac
Accepted a position at Raytheon Technologies in Tucson.

Aryaman Nath
Accepted a position at Raytheon Technologies in Tucson.

Madeline Procter
Accepted a position at Raytheon Technologies in Tucson.

Rusty Rinehart
Accepted a position at Raytheon Technologies in Tucson.

Bianca Rodriguez
Accepted a position at Raytheon Technologies in Tucson.

Collin Preszler
Accepted a position at Raytheon Technologies in Tucson.
CLASS OF 2023 REMARKS

Ashton Rowe
Thanks to my friends and family who have supported me throughout the last 4 years; I wouldn’t have made it without you. It’s definitely been a challenge but I’m thankful for the experiences I’ve had and look forward to what the future will bring.

“I am very thankful to my family, friends, and ECE faculty who have supported me for the past years! Pursuing an MS degree in ECE at Johns Hopkins University.

 Accepted a position with IOTA Engineering in Tucson.

Nick Smith
Pursuing an MS degree at UArizona.

Zhehao Zhang
Thank you to my family, friends, and ECE faculty who have supported me for the past years! Pursuing an MS degree in ECE at Johns Hopkins University.

 Accepted a position at SpaceX in Redmond, WA.

Timor Shahin
I am very thankful to my family for supporting me all these years, and I am very thankful to all the friends and teachers I have met here for helping me achieve success and for making this journey a fun experience.

“Thank you to my family, friends, and ECE faculty who have supported me for the past years! Pursuing an MS degree in ECE at Johns Hopkins University.

 Accepted a position with IOTA Engineering in Tucson.

Elliot Zuercher
I’d like to thank my mother for having the patience to home-school me ten years, my father for putting up with my math temper tantrums and inspiring me to become an engineer, my Pima professors who prepared me for university, my U of A professors who gave me the tools to pursue my interests and discipline my mind, and finally my amazing classmates who supported me through the long, hard evenings spent in the ECE building! It has been an amazing and unforgettable journey.

Pursuing a graduate degree in electrical engineering at UArizona.

Alexander Fusco
Thesis Title: “Hardware-based Scheduler Design Methodology for Domain-Specific Systems-on-Chip”
Advisor: Dr. Ali Akoglu
Accepted a position at SpaceX in Redmond, WA.

Diego Moscoso
“If everything you try works, you aren’t trying hard enough.” - Gordon Moore
Accepted a position at Meggitt Securaplane in Tucson, AZ.

Jonathon Herrera
I am thankful for all my professors, friends, and family members who believed and encouraged me through this academic journey. Above all, I am forever grateful for my beautiful wife, Anabel. Without her unwavering support and love, I would not have been able to achieve this incredible milestone.

 Currently working at Raytheon Technologies in Tucson.

Celyn Jacobs
Pursuing a graduate degree at Harvard University.

Ashton Rowe
Thanks to my friends and family who have supported me throughout the last 4 years; I wouldn’t have made it without you. It’s definitely been a challenge but I’m thankful for the experiences I’ve had and look forward to what the future will bring.

“I am very thankful to my family, friends, and ECE faculty who have supported me for the past years! Pursuing an MS degree in ECE at Johns Hopkins University.

 Accepted a position with IOTA Engineering in Tucson.

Elliot Zuercher
I’d like to thank my mother for having the patience to home-school me ten years, my father for putting up with my math temper tantrums and inspiring me to become an engineer, my Pima professors who prepared me for university, my U of A professors who gave me the tools to pursue my interests and discipline my mind, and finally my amazing classmates who supported me through the long, hard evenings spent in the ECE building! It has been an amazing and unforgettable journey.

Pursuing a graduate degree in electrical engineering at UArizona.

Alexander Fusco
Thesis Title: “Hardware-based Scheduler Design Methodology for Domain-Specific Systems-on-Chip”
Advisor: Dr. Ali Akoglu
Accepted a position at SpaceX in Redmond, WA.

Jonathon Herrera
I am thankful for all my professors, friends, and family members who believed and encouraged me through this academic journey. Above all, I am forever grateful for my beautiful wife, Anabel. Without her unwavering support and love, I would not have been able to achieve this incredible milestone.

 Currently working at Raytheon Technologies in Tucson.

Celyn Jacobs
Pursuing a graduate degree at Harvard University.

Richelle Javier
Thank you to everyone that has been a part of my journey throughout college. I am forever grateful for your support, love, friendship and guidance! A special thank you to my parents and family in the Philippines.

 Accepted a position at Northrop Grumman in Redondo Beach, CA.

Joaquin Pesqueira
I’m pretty tired, think I’ll go home now. - Forrest Gump
Accepted a position at Raytheon Technologies in Tucson.

Trent Boice
Thanks for all the support to my family. I couldn’t have done it without you!

 Accepted a position at Honeywell Aerospace in Clearwater, FL.

Celyn Jacobs
Pursuing a graduate degree at Harvard University.

Derek Nielsen
Thank you to everyone who has supported and motivated me on this journey!

Continuing my current position at Raytheon Technologies in Tucson.

Derek Nielsen
Thank you to everyone who has supported and motivated me on this journey!

Continuing my current position at Raytheon Technologies in Tucson.

Joaquin Pesqueira
I’m pretty tired, think I’ll go home now. - Forrest Gump
Accepted a position at Raytheon Technologies in Tucson.

Diego Moscoso
“If everything you try works, you aren’t trying hard enough.” - Gordon Moore
Accepted a position at Meggitt Securaplane in Tucson, AZ.

Alexander Fusco
Thesis Title: “Hardware-based Scheduler Design Methodology for Domain-Specific Systems-on-Chip”
Advisor: Dr. Ali Akoglu
Accepted a position at SpaceX in Redmond, WA.

Jonathon Herrera
I am thankful for all my professors, friends, and family members who believed and encouraged me through this academic journey. Above all, I am forever grateful for my beautiful wife, Anabel. Without her unwavering support and love, I would not have been able to achieve this incredible milestone.

 Currently working at Raytheon Technologies in Tucson.

Celyn Jacobs
Pursuing a graduate degree at Harvard University.

Richelle Javier
Thank you to everyone that has been a part of my journey throughout college. I am forever grateful for your support, love, friendship and guidance! A special thank you to my parents and family in the Philippines.

 Accepted a position at Northrop Grumman in Redondo Beach, CA.

Joaquin Pesqueira
I’m pretty tired, think I’ll go home now. - Forrest Gump
Accepted a position at Raytheon Technologies in Tucson.

Trent Boice
Thanks for all the support to my family. I couldn’t have done it without you!

 Accepted a position at Honeywell Aerospace in Clearwater, FL.

Celyn Jacobs
Pursuing a graduate degree at Harvard University.

Derek Nielsen
Thank you to everyone who has supported and motivated me on this journey!

Continuing my current position at Raytheon Technologies in Tucson.

Joaquin Pesqueira
I’m pretty tired, think I’ll go home now. - Forrest Gump
Accepted a position at Raytheon Technologies in Tucson.

Diego Moscoso
“If everything you try works, you aren’t trying hard enough.” - Gordon Moore
Accepted a position at Meggitt Securaplane in Tucson, AZ.
CLASS OF 2023 REMARKS

Christopher Schultze
Continue working to develop skills and advance the state-of-the-art.

Aaron Winkle
Accepted a position at IBM in Tucson.

DOCTOR OF PHILOSOPHY

Arash Roshanineshat
Dissertation Director: Dr. Dan Marrone
Accepted a position at Texas Instruments in Tucson.

John Siahaan
I would like to first and foremost give thanks to our faithful God for this amazing opportunity. I give thanks to ECE faculty members and staffs, friends and family for your guidance, support and sacrifices. To my beautiful wife and handsome son, we missed many family time to make this happen and have a brighter future. I can relax a little and enjoy time with you again.

“Failures happen to two types of people. Those who plan without doing. And those who do without planning.”
- Orang Batak
Continue working at Raytheon Technologies in Tucson.

Micah Sieglaff
Accepted a position with Caterpillar in Tucson.

Shalaka Satam
Dissertation Director: Dr. Salim Hariri
Accepted a position at Ford Motor Company in Dearborn, MI.
ECE MEMORIES

Some of the Class of 2023 graduates' favorite ECE memories.

Three titans of the 2022-23 IEEE. Left to right: Rusty Rinehart, ViceChair, Chris Bremser, Chair and Ary Nath, Treasurer. - Chris Bremser

A good group of friends at Waffle House! - Isabel Dailey

Lightning strike for Senior Design Project - Riley Cowling

Freshman year, Solar Oven Throw Down - Kathryn Hoang

12m radio telescope at Kitt Peak. I've spent many nights up there to setup hardware and observe for the Event Horizon Telescope project. - Arash Roshanineshat
ECE MEMORIES

The faces of students who haven’t experienced ECE 369
- Alan Loreto Corindez

The grind don’t stop. - David Mazi

This was my senior design team’s first of two autonomous 1/10 scale racecars built. I will always remember the joy of it powering up and eventually driving itself around our small track without crashing. - Ryan Prather

Theta Tau Professional Engineering Fraternity’s Spring 2021 Pledge Class
- Ethan Potthoff

UA IEEE Student Branch at the 2023 Rising Stars Conference in Las Vegas, NV
- Rusty Rinehart

ECE 351 Audio Amplifier Circuit - Aaron Winkle
To all the graduating seniors, may your future be filled with unwavering connections, boundless opportunities, and the resilience to overcome any obstacles that you may encounter. I hope you will take charge of your destiny, stay true to your dreams, and always find the keys to happiness and success! Congratulations!

- Tosi Adegbija, Associate Professor

Congratulations Class of 2023! You have worked hard to achieve your goals and we are so proud of all you have accomplished!

- Kelly Simmons-Potter, Director of Graduate Studies and Professor

Congratulations Class of 2023! Your degree is a truly valuable accomplishment that represents all the hard work and dedication you have put in. I am proud of you and wish you all the best in your next adventure!

- Siyang Cao
  Associate Professor

Congratulations on your outstanding achievement! We are very proud of you. Wishing you the best in your future endeavors!

- Dale Hetherington
  Professor of Practice

Congratulations Class of 2023. We’re proud of you.

- Marwan Krunz
  Regents Professor

Congratulations on your outstanding achievement! We are very proud of you.

- Michael W. Marcellin
  Regents Professor

Heartfelt congratulations on your accomplishments. Be yourselves and follow your passions.

- Jerzy W. Rozenblit
  University Distinguished Professor

Congratulations on your achievement. Best of Luck with your future endeavors.

- Kay Thamvichai
  Professor of Practice
FACULTY & STAFF REMARKS

Congratulations on your achievements in 2023! It has been a pleasure working with you all—can’t wait to hear about all you continue to accomplish from here!

- Keli Brinke, Administrative Support Specialist
The University of Arizona Department of Electrical and Computer Engineering

**CORE FACULTY**

Mohammad Abu Matar
Associate Professor of Practice
- software engineering • cloud computing • software architectural design

Tosiron Adegbija
Associate Professor
- high-performance embedded computing • low-power embedded systems design

Ali Akoglu
Professor
- high-performance computing • reconfigurable computing • adaptive hardware systems

Boulat Bash
Assistant Professor
- information theory to practical problems of reliability and security

Ali Bilgin
Associate Professor
- signal and image processing • data compression • magnetic resonance imaging

Tamal Bose
Professor
- adaptive filtering • spectrum sensing • cognitive radios • channel equalization

Siyang Cao
Associate Professor
- radar signal processing • adaptive radar systems • innovative sensing systems

Ivan B. Djordjevic
Professor
- optical communications and networks • quantum information processing

Steven L. Dvorak
Professor
- geophysical applications of electromagnetics • optics • applied mathematics

Wolfgang Fink
Edward & Maria Keonjian Endowed Chair and Associate Professor
- artificial vision • autonomous robotic space exploration • biomedical sensors

Liesl Folks
Senior Vice President for Academic Affairs and Provost
- magnetic materials and devices • nanoscale metrology • spin-electronic devices

Christos Gagatsos
Assistant Professor
- quantum information and optics • probability theory and coding • applied mathematics • electromagnetism

Salim Hariri
Professor
- autonomic cybersecurity • big data analytics • resilient cloud services

Gregory Heileman
Vice Provost for Undergraduate Education and Professor
- data science • machine learning

Dale Hetherington
Professor of Practice
- electronic circuits • embedded microcontrollers • semiconductor processing

Raymond Kostuk
Professor
- optics • photonics

Marwan Krunz
Regents Professor and Kenneth Von Behren Endowed Professor
- wireless networks • cognitive and software-defined radios • MIMO communications

Loukas Lazos
Professor
- network security • algorithms • network optimization • wireless communications

Kathleen Melde
Associate Dean of Faculty Affairs and Inclusion, College of Engineering and Professor
- antennas for computing • wildlife tracking • microwave circuit design

Kelly Simmons-Potter
Professor
- response of optical materials and devices to ionizing and non-ionizing radiation

Abhijit Mahalanobis
Associate Professor
- imaging systems • machine vision and pattern recognition systems, infra-red and RF automatic target recognition

Michael W. Marcellin
Regents Professor and International Foundation for Telemetering Professor
- digital communication and data storage systems • data compression • signal processing

Michael M. Marefat
Associate Professor
- intelligent systems • computer vision and robotics • machine learning

Ming Li
Associate Professor
- information security and privacy • wireless networking • cybersecurity

Tosiron Adegbija
Associate Professor
- high-performance embedded computing

Ali Akoglu
Professor
- high-performance computing • reconfigurable computing • adaptive hardware systems

Boulat Bash
Assistant Professor
- information theory to practical problems of reliability and security

Ali Bilgin
Associate Professor
- signal and image processing • data compression • magnetic resonance imaging

Tamal Bose
Professor
- adaptive filtering • spectrum sensing • cognitive radios • channel equalization

Siyang Cao
Associate Professor
- radar signal processing • adaptive radar systems • innovative sensing systems

Ivan B. Djordjevic
Professor
- optical communications and networks • quantum information processing

Steven L. Dvorak
Professor
- geophysical applications of electromagnetics • optics • applied mathematics

Wolfgang Fink
Edward & Maria Keonjian Endowed Chair and Associate Professor
- artificial vision • autonomous robotic space exploration • biomedical sensors

Liesl Folks
Senior Vice President for Academic Affairs and Provost
- magnetic materials and devices • nanoscale metrology • spin-electronic devices

Christos Gagatsos
Assistant Professor
- quantum information and optics • probability theory and coding • applied mathematics • electromagnetism

Salim Hariri
Professor
- autonomic cybersecurity • big data analytics • resilient cloud services

Gregory Heileman
Vice Provost for Undergraduate Education and Professor
- data science • machine learning

Dale Hetherington
Professor of Practice
- electronic circuits • embedded microcontrollers • semiconductor processing

Raymond Kostuk
Professor
- optics • photonics

Marwan Krunz
Regents Professor and Kenneth Von Behren Endowed Professor
- wireless networks • cognitive and software-defined radios • MIMO communications

Loukas Lazos
Professor
- network security • algorithms • network optimization • wireless communications

Kathleen Melde
Associate Dean of Faculty Affairs and Inclusion, College of Engineering and Professor
- antennas for computing • wildlife tracking • microwave circuit design

Kelly Simmons-Potter
Professor
- response of optical materials and devices to ionizing and non-ionizing radiation
Narayanan Rengaswamy  
Assistant Professor  
classical and quantum error correction • quantum computing • information theory • signal processing

Jeffrey J. Rodriguez  
Associate Professor  
signal-image-video processing and analysis • automated image analysis

Janet Meiling Roveda  
Professor  
smart grid and smart home • VLSI systems for biomedical applications • multicore design

Jerzy W. Rozenblit  
University Distinguished Professor  
design and analysis of complex systems • modeling and computer simulation

Soheil Salehi  
Assistant Professor  
hardware and AI-enabled security • signal conversion and processing • AI hardware • computer architectures • VLSI circuits

Ravi Tandon  
Litton Industries, John M. Leonis Distinguished Associate Professor  
information and coding theory • wireless communications • machine learning

Ratchaneeekorn “Kay” Thamvichai  
Professor of Practice  
digital signal processing • communications

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Bane Vasić  
Professor  
digital communications • error correction codes • memory and storage systems • quantum error correction

Michael Wu  
Department Head and Professor  
cybersecurity • mobile computing • wireless networks • computer communications

Hao Xin  
Professor  
microwave • millimeter-wave and THz devices • circuits • antennas

Danella Zhao  
Associate Professor  
computer architecture • cybersecurity • embedded system design

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Ratchaneeekorn “Kay” Thamvichai  
Professor of Practice  
digital signal processing • communications

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Bane Vasić  
Professor  
digital communications • error correction codes • memory and storage systems • quantum error correction

Michael Wu  
Department Head and Professor  
cybersecurity • mobile computing • wireless networks • computer communications

Hao Xin  
Professor  
microwave • millimeter-wave and THz devices • circuits • antennas

Daniel Zhao  
Associate Professor  
computer architecture • cybersecurity • embedded system design

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Ratchaneeekorn “Kay” Thamvichai  
Professor of Practice  
digital signal processing • communications

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Bane Vasić  
Professor  
digital communications • error correction codes • memory and storage systems • quantum error correction

Michael Wu  
Department Head and Professor  
cybersecurity • mobile computing • wireless networks • computer communications

Hao Xin  
Professor  
microwave • millimeter-wave and THz devices • circuits • antennas

Danella Zhao  
Associate Professor  
computer architecture • cybersecurity • embedded system design

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Ratchaneeekorn “Kay” Thamvichai  
Professor of Practice  
digital signal processing • communications

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Bane Vasić  
Professor  
digital communications • error correction codes • memory and storage systems • quantum error correction

Michael Wu  
Department Head and Professor  
cybersecurity • mobile computing • wireless networks • computer communications

Hao Xin  
Professor  
microwave • millimeter-wave and THz devices • circuits • antennas

Danella Zhao  
Associate Professor  
computer architecture • cybersecurity • embedded system design

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Ratchaneeekorn “Kay” Thamvichai  
Professor of Practice  
digital signal processing • communications

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Bane Vasić  
Professor  
digital communications • error correction codes • memory and storage systems • quantum error correction

Michael Wu  
Department Head and Professor  
cybersecurity • mobile computing • wireless networks • computer communications

Hao Xin  
Professor  
microwave • millimeter-wave and THz devices • circuits • antennas

Danella Zhao  
Associate Professor  
computer architecture • cybersecurity • embedded system design

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Ratchaneeekorn “Kay” Thamvichai  
Professor of Practice  
digital signal processing • communications

Hal S. Tharp  
Associate Department Head and Associate Professor  
control theory • engineering education

Bane Vasić  
Professor  
digital communications • error correction codes • memory and storage systems • quantum error correction

Michael Wu  
Department Head and Professor  
cybersecurity • mobile computing • wireless networks • computer communications

Hao Xin  
Professor  
microwave • millimeter-wave and THz devices • circuits • antennas

Danella Zhao  
Associate Professor  
computer architecture • cybersecurity • embedded system design
elif operation == "MIRROR_Z":
mirror_mod.use_x = False
mirror_mod.use_y = False
mirror_mod.use_z = True

#selection at the end - add back the deselected mirror modifier
mirror_ob.select = 1
modifier_ob.select = 1
bpy.context.scene.objects.active = modifier_ob
print("Selected" + str(modifier_ob)) # modifier ob is the active

#mirror_ob.select = 0
none = bpy.context.selected_objects[0]
bpy.data.objects[none.name].select = 0