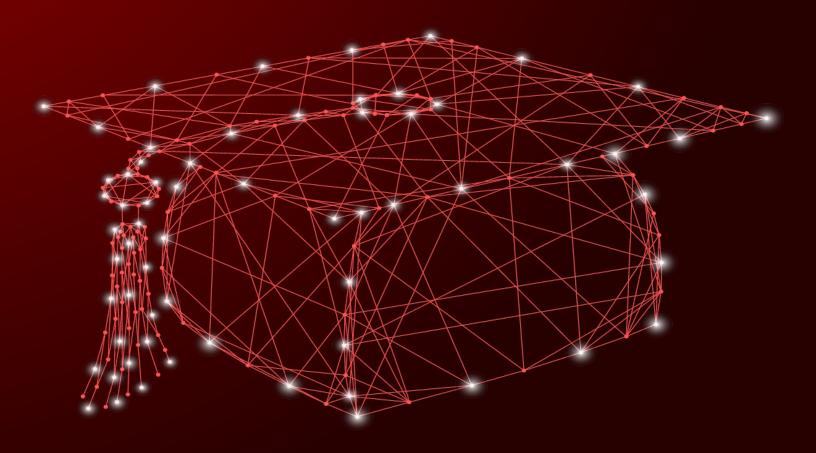
ECECLASS OF 2022 SHOWCASE







Published for the Spring 2022 graduates of the University of Arizona Department of Electrical and Computer Engineering in the College of Engineering. Produced by Susan Novosel and UA Engineering Marketing and Communications.

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CONGRATULATORY MESSAGE

Congratulations! You made it.

Today is the day you join an elite group of University of Arizona ECE alumni. You worked hard to get here, and you deserve the recognition.

ECE is one of the toughest majors on campus – long hours poring over homework, working in the labs, studying for exams, design projects, and running computer program after computer program. You pressed on and overcame all the challenges.



Tamal Bose

Now is the time to look forward and discover new opportunities, no matter how difficult things may seem. Keep following your passion, find your line of work, and make people's lives better. The world is counting on you!

You are among ECE graduates pursuing exciting careers. Our alumni are successful scientists, engineers, explorers and entrepreneurs, working in government and industry and for themselves across the entire spectrum of professions.

So, in a sense, this degree is actually the beginning of your journey. You triumphed academically, and no doubt you will do well professionally. After all, you have an ECE degree, and you are a Wildcat! You may become rich and famous, but ultimately you will be known for how you treat others – for your kindness, humility, and service.

Be sure to thank everyone who has been there for you along the way and show your appreciation for their support and guidance.

We look forward to hearing from you soon, and to keeping in touch in the months and years to come.

Bear Down ECE Wildcats!

Tamal Bose, Ph.D.

Professor and Department Head

Electrical and Computer Engineering

Tamel Bre

Class of 2022 Showcase

ACKNOWLEDGMENTS AND AWARDS

Outstanding ECE Students

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

Outstanding Senior

Andre Maurice Schreiber



Outstanding Graduate Teaching Assistant

Alexander Fusco



Outstanding Graduate Teaching Assistant

Shuting Hu



ECE Engineering Ambassador

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.



Samantha R. Schultz

Hometown: Chandler, AZ (Hamilton High School)

Undergraduate highlights:

- Member of Society of Women Engineers; President of Wildcats Committed to Animal Rescue and Education (CARE), and recording secretary of Tau Beta Pi Engineering Honors Society
- Involved in several Intramural Sports
- Two internships with Raytheon Technologies

Plans after graduation: Accepted a software engineering position at L3Harris in Phoenix, AZ.

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 Zhuangzhuang Chen

Outstanding Staff Tami Whelan Graduate Academic Advisor



Outstanding Faculty Michael Marcellin Regents Professor











BACHELOR OF SCIENCE DEGREE

A

Mansour Adel Albayyat

Ali A. M. H. Albhrani Sr.

Naser J. N. Alhouti

Mohammed Algallaf

Mohammad Ahmad Al-Yaqoub

Kevin Antony Gomez

B

Connor Lynn Benson

Sarah M. Bierman

Prabhkirat S. Bindra

Lewis A. Brownlie

Timothy Dale Buechler

Brandon Bui

C

Rafael Candelas

Keegan Carl Chafin

Sehrish Shahbaz Choudhary

Christopher Dale Christiansen

Allen Cooper

Juan Alvaro Corella

D

Parker Dattilo

Jazlan Lauren Davis

Raquelle E. Denetso

Brenda Raquel Dicochea

E

Jacob T. Eberhard

Emmanuel Gabriel Enriquez

Osvaldo Estrella

Brian C. Faires

Daniel Fernandez Jr.

Stefano Ezekiel Figueroa

G

Thomas Allen Gansheimer Jr.

Gerardo Mora Garcia Jr.

Susan Kaylen Gee

Н

Tyler D. Hedrick

Jason Crandler Heiman

Kale E. Henning

Dominic Maxwell Holsinger

Haseeb Sarwar Irfan

J

Celyn Thomas Jacobs

Richelle Rose Igcasenza Javier

Andrew M. Jenkins

Devin Anthony Johnson

K

Rosemary J. Kingsley

Spencer Kittredge

Roberto Kupps

Allen Lafferty

Caiyue Lai

Eric Marcos Lawson

Joe Hou Liang

Jesus Alberto Lopez II

Michelle Ivonne Loustaunau

M

Connor Eash McCreary

Mark Allen McDaniel

Diego Alejandro Moscoso

William James Mund

N

Theodore Douglas Neill

Billy T. Nguyen

0

Patricia Lee Orso

P

Arvin Raj Pandey

Maricruz Pavlovich Contreras

Charles C. Penny

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BACHELOR OF SCIENCE DEGREE

Joaquin Eduardo Pesqueira
Teresa Thuytien Pham
Edward Hoang Phuong
Conner James Pierce

R

Nathaniel Rodriguez

Casey Alden Rounseville

S

Spencer Joshua Scher
Andre Maurice Schreiber
Samantha R. Schultz
Vanessa Shin
Ryan Paul Stancliffe
Jacob Summerville

Kama Lauren Svoboda

Brian Willis Terry
Tamillia N. Thomas
Brendan Tobin

V

Christopher K. Vuong

W

Michael Cameron Warner

Jeremiah Michael Weber

Logan West

Ryan Scott Westley

Aaron T. Winkle

Nathan Eric Wolff

Tyler Ray Wong

Joshua C. Wu

Y

Brendan Kai-jiang Yip

Z

Bradley M. Zimmermann





We're so proud of you, and honored to celebrate graduation day with you. Congratulations and best wishes for your next adventure!





MASTER OF SCIENCE DEGREE

A

Hassan Aftab

Madeleine Blue Armstrong

Amir Mohammad Asdagh Pour

B

Wyatt Nations Bettis

Alex Dean Blackmon

John Blair

Christopher Aaron Brown

C

Michelle Carroll

Samuel Jason Comeau

D

Sterling Lee Davis

Joel Richard Dierks

Kenneth Richard Dixon

Zachary Alan Dryer

E

Joseph Christian Emnett

Н

Thomas Wesley Harp

James Henderson

Brandon Hertneky
Charles William Hoskins

Ryan Jarick

K

Jaewan Kim

Benjamin D. Koch

Dusty J. Kuban

Jiyu Liu

M

Cody Macdonald

David Maughan

Shannon Marie McCoy

Jacob Simon Merki

Noor Mohammad

Randall Alan Moon

Kristen Adair Murphy

N

Jennifer Nadolski

Touyen Tracy Nguyen

0

Louis Oberto

P

Jacob Celso Padilla

Rohan Rasiklal Patel

Kenny Phu

Austin Tyler Pierson

Q

Edgar Quintana

R

Ricardo Franco Ross

S

Zahra Sadeq

Jaileen Atenea Salazar

Joseph Sangese

Brian David Schumacher

Delbert Spangler

Cade Ryan Stephenson

Amelia Sylvester

T

Brady Thomas

Anibal Antonio Torres

U

Paul Michael Udorvich

V

Ignacio Vazquez Lam

Michelle Vega

Rishab Verma

W

Eric Charles Walk

Nicholas Owen Watson

Sooyoung Wi

Stone Wilkes

Frances Patricia Willberg

Jeremy Clay Williams

X

Yukai Xie

Y

Zhaohui Yang

Z

Weiyang Zhang

Class of 2022 Showcase - 11 -

DOCTOR OF PHILOSOPHY DEGREE

B

Rahul Kumar Bhadani

C

Wei-Ting Chang

H

Samuel Thomas Hess

L

Teh Lai

M

Mohammad Sadegh Majdi

Mohamed Mohamed

P

Ziwen Pa

S

Arindam Sengupt

W

Chongke Wu

Z

Tianchi Zhao



Congratulations on earning your ECE degree.

I am so happy for all of you!

Bear Down! Your ECE Advisor, Tami Whelan





CLASS OF 2022 REMARKS

The following degree recipients have shared their photos and personal statements!

BACHELOR OF SCIENCE

Mohammad Ahmad Al-Yaqoub



"Strive when you're young to rest when you're old." This is a quote I've learnt from my dear father, Ahmad Al-Yaqoub, and I have believed in it ever since.

I'd like to thank my father, my mother and my beloved family and friends, because without them I would not be here. It's been a long journey which I had to embrace and then overcome.

Pursuing an MBA.

Timothy Dale Buechler



I want to give a special thanks to my family, friends, and fellow ECE colleagues for all the help, support, and encouragement that they provided me these past four years. I couldn't have done this without you all!

Accepted a position with Texas Instruments in Tucson.

Sarah M. Bierman



Thank you to my family and friends for making the past four years possible. I have grown so much through the ups and downs and am eternally grateful for the journey. Bear Down!

Accepted a position at Axon Enterprise in Scottsdale.

Sehrish Shahbaz Choudhary



I will always remember the support and generosity of my family and friends as I explore new goals, adventures and work toward new achievements. Most importantly, I am very grateful to Allah (SWT) and my parents, for without them, this would not be possible.

Accepted a position at General Motors in Warren, MI.

Lewis A. Brownlie



I am very grateful for my experience at the University of Arizona and for all the faculty, staff, and students that played such a big part of my life. I have grown so much in my four years here, both academically and personally, and I can't wait to see what the future holds. Bear Down!

"For we are God's handiwork, created in Christ Jesus to do good works, which God prepared in advance for us to do." - Ephesians 2:10

Accepted a position at Garmin International in Tucson.

Juan Alvaro Corella



Although these five years have been challenging, they have also been exciting and enjoyable. I have had an amazing experience at the University of Arizona, where I expanded my knowledge and met many interesting people. I would like to thank my professors, classmates, friends, family, mother, father and sister for their constant support in this amazing moment of my life. I am grateful for every single one of you. Thank you.

Jazlan Lauren Davis



"Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do." - Edson Arantes do Nascimento (Pele)

Special thank you to Dr. Kay Thamvichai and Dr. Tosi Adegbija for always supporting me and listening to my occasional spiels.

Pursuing a graduate degree at UArizona.

Gerardo Mora Garcia Jr.



I would like to thank my family for supporting me on this journey, my Catholic Newman Center friends for the community they've given me, my ECE friends for sticking with me through all the labs and long study nights and the ECE Department for helping me become the engineer that I am today.

Accepted a position at Teradyne in Agoura Hills, CA.

Raquelle E. Denetso



Thank you to my friends and family for your love and support! Especially to my parents who continued to push me and offered their continuous support and advice throughout college (and life in general). I couldn't have done it without you guys. Love you!

Accepted a position at Raytheon Technologies in Tucson.

Richelle Rose Igcasenza Javier



Thank you to all my friends and families who always supported me these past four years! I wouldn't have grown to be the person I am today without you.

Pursuing a AMP degree in ECE at UArizona. Accepted an internship at Northrop Grumman in Redondo Beach, CA.

Brenda Raquel Dicochea



"You can never be the best.

The only thing you can be the best at is developing yourself."

- Natalie Portman

I would like to thank my family for their unwavering support. Thank you for always believing in me and pushing me to be my absolute best. I love you all to the moon and back.

Accepted a position at Raytheon Technologies in Tucson. Pursuing an MS degree in ECE at UArizona.

Roberto Kupps



Breathe in. Breathe out. Repeat. Thank you Mom and Dad, I have succeeded because of you.

Accepted a position at Texas Instruments in Dallas.

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CLASS OF 2022 REMARKS

Caiyue Lai



Pursuing an MS degree at Northeastern University.

Jesus Alberto Lopez II



"For all that our parents do for us, there is no way of repaying them. Though they do not expect anything but love from us, an occasional thank you or an acknowledgment to appreciate them might just make them happy."

— Anonymous

Pursuing an MS degree in ECE.

Eric Marcos Lawson



Pursuing an MS degree at the University of Arizona.

Diego Alejandro Moscoso



Thank you to my family, friends, classmates, and ECE faculty for all the support in pursuing a higher education! To my fellow graduates, congratulations!

Pursuing an MS degree at the University of Arizona.

Joe Hou Liang



Pursuing an MS degree at the University of Arizona.

Patricia Lee Orso



here without all of you.

"Life is not easy for any of us. But what of that? We must have perseverance and above all confidence in ourselves. We must believe that we are gifted for something and that this thing must be attained." - Marie Curie

Thank you to my mom and dad who have always believed in me. Thank you to my daughter for giving me motivation. And a special thanks to my husband who loved and supported me through it all. I would not be

Accepted a position at Raytheon Technologies in Tucson.

Arvin Raj Pandey



"Working hard is important but there is something that matters even more; believing in yourself." - J.K. Rowling

Accepted a position at Opus Inspection in Tucson.

Samantha R. Schultz



Thank you to all of my friends and family who have supported me on this journey for the past four years!

Accepted a position at L3Harris in Phoenix.

Maricruz Pavlovich Contreras



Accepted a position at Texas Instruments in Tucson and pursuing an ECE MS degree.

Christopher K. Vuong



"Well done is better than well said." -Benjamin Franklin

Accepted a position at Texas Instruments in Tucson.

Andre Maurice Schreiber



I'd like to thank my family, friends, and also some outstanding teachers for all their support and encouragement, and I look forward to continuing my academic journey!

Pursuing a Ph.D. degree in ECE at the University of Illinois Urbana-Champaign.

Ryan Scott Westley



"My hard work finally catching up with perfect timing."- Future

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CLASS OF 2022 REMARKS

Nathan Eric Wolff



"You have no idea how high I can fly." - Michael Scott

Accepted a position at M3 Engineering and Technology.

Zachary Alan Dryer



"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel." - Maya Angelou

MASTER OF SCIENCE

Wyatt Nations Bettis



- "The love of learning, the sequestered nooks, And all the sweet serenity of books."
- Henry Wadsworth Longfellow

Currently working at Collins Aerospace in IA.

Jaewan Kim



Thank you to everyone who helped me to achieve my Master's degree. All the ECE professors whose classes I attended were very kind and nice. I have good memories. Thank you to my advisor, Dr. Jerzy W. Rozenblit.

Thesis Title: "Performance Evaluation and Optimization of RPL in Broadband-PLC network for Advanced Metering Infrastructure"

Thesis Advisor: Jerzy W. Rozenblit

Samuel Jason Comeau



"Today we live; tomorrow—who knows? Best we be prepared and rested to avoid being bested." - Admiral Eugene B. Fluckey

Jaileen Atenea Salazar



Gracias a mi increíble familia y gatitos por su persistente motivación y apoyo. ¡Esto es para todos nosotros!

Thank you to my amazing family and kitties for your persistent motivation and support. This is for all of us!

Continuing a position at American Express in Phoenix.

Weiyang Zhang



I would like to take this special opportunity to say thank you to all of my friends and family. Your generous support makes my dreams come true in the United States. I especially say thank you to my family Rosey He and Yeliz, and thanks for all of the things you have done for me. Because of you, I did not feel alone in Tucson. I appreciate it.

Accepted a position at Cegis Cyber Inc. in Tucson.





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CLASS OF 2022 REMARKS

DOCTOR OF PHILOSOPHY

Wei-Ting Chang



"Every strike brings me closer to the next home run." - Babe Ruth

Accepted a position at NXP USA, Inc. in Irvine, CA.

Mohamed Mohamed



I would like to express my sincere gratitude to my ECE faculty advisors (especially Prof. Ravi Tandon and Prof. Ming Li) and staff (especially Ms. Tami Whelan) for their support during my PhD journey at UArizona. A very special thanks to my parents, family and friends. We made it!

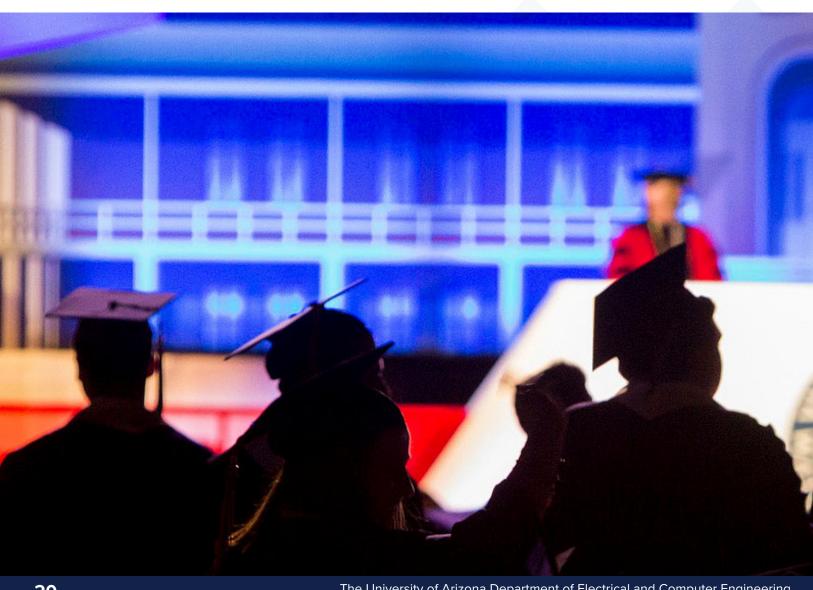
Pursuing a postdoc at Princeton University.

Dissertation Title: "Privacy and Communication Efficiency in Distributed Computing and Learning"

Dissertation Director: Dr. Ravi Tandon

Dissertation Title: "Security and Privacy in Information Systems: Algorithms and Fundamental Limits"

Dissertation Directors: Dr. Ravi Tandon and Dr. Ming Li



Ziwen Pan



"Time, after all, is the only thing we cannot change."

Accepted emploment in CA.

Arindam Sengupta



"Arise, awake and stop not till the goal is reached." – Swami Vivekananda.

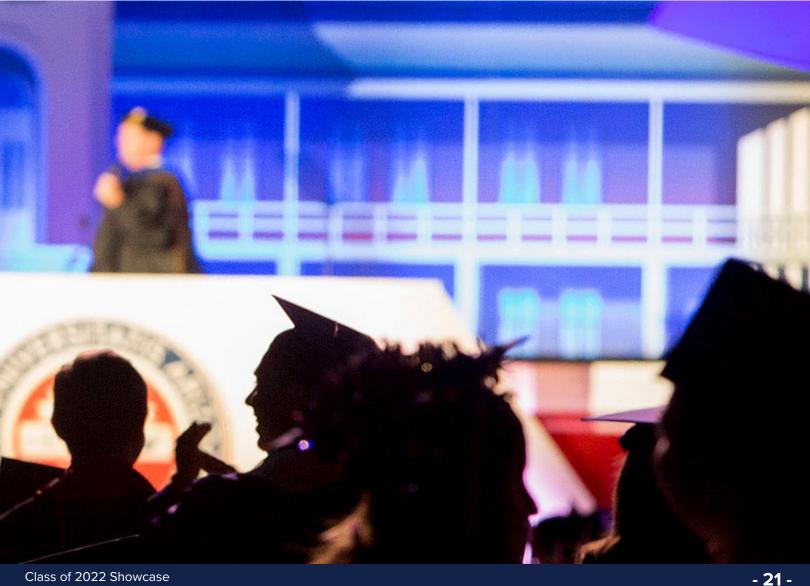
Accepted a position at Spartan Radar in Los Alamitos, CA.

Dissertation title: "Geometrical Optics Restricted Eavesdropping Analysis of Secret Key Distillation and Its Application to Satellite-to-Satellite Free Space Links"

Dissertation Director: Dr. Ivan B. Djordjevic

Dissertation Title: "Enhancing mmWave Radar Capabilities Using Sensor-Fusion and Machine Learning"

Dissertation Advisor: Dr. Siyang Cao



ECE MEMORIES

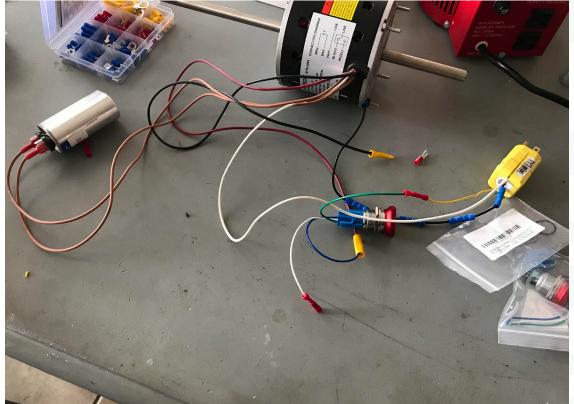
Some of the Class of 2022 graduates' favorite ECE memories.



Wildcat Orientation! - Ziwen Pan



Capstone Group at the PING Putter Vault - Eric Lawson



In my senior capstone project, the Tucson Village Farm has asked our team to create a popcorn processor which will wash and dry loads of popcorn kernels. We have installed motors that will help operate the system automatically. As the electrical lead, I wired the conducting cables to a plug that can be plugged into an outlet. Additionally, I installed an emergency shutoff switch to increase safety for the user. I have wired both motors, one for the washer motor and the other for the dryer motor.

- Juan Alvaro Corella



Senior Capstone Project! - Richelle Rose Javier



Testing for Senior Design (Project: Baja Electronic Continuously Variable Transmission) - Andre Schreiber

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ECE MEMORIES



PING Gold Putter Vault - Nathan Wolff



Building electrical system for Senior Design Project - Gerardo Mora Garcia



Undergrad Senior Design Project -



Kenny Phu



Craig M. Berge Design Day Team #22026. Project: "A Real-Time Vegetation Stress Detection System on a Drone." Winner of 1) Best Implementation of Agile Methodology;

2) Best UAS Design (2nd Prize); and 3) Best Use of Embedded Intelligence - Caiyue Lai



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FACULTY REMARKS



Bravo to the Graduate Class of 2022 for its remarkable achievements. You have a bright future ahead of you and are ready to face the world's grand challenges. Use your talents to chase your dreams and affect positive change. I look forward to hearing about your future endeavors.

- Loukas Lazos, Professor



Congratulations on your achievements and resilience during such extraordinary events of the last two years. Warm wishes for a great future ahead of you.

Jerzy W. Rozenblit,
 University Distinguished
 Professor



Congratulations! – So proud of you!

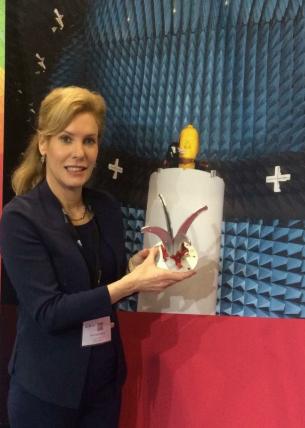
- Michael W. Marcellin, Regents Professor



Congratulations Class of 2022! I believe that your hard work over the last few years will provide a strong foundation on which to build your future. I sincerely hope that you have enjoyed your time at the UA and I wish you the very best in the future.

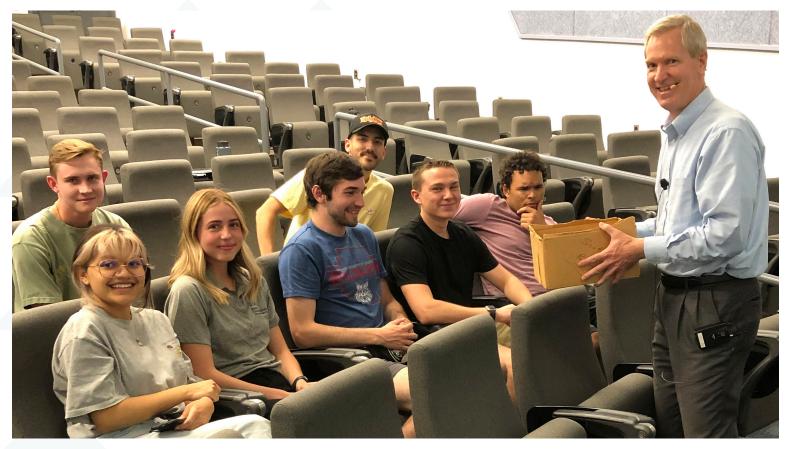
- Steve Dvorak, Professor





Congratulations ECE Wildcats. A hardearned degree, you deserve a little rest. We are proud of you and your work and are excited to hear about the next chapter in your journey. One of our greatest joys is when former Wildcat grads check in with us 1, 5, 10, or more years down the line. We can't wait to hear from you.

 Kathleen Melde, Associate Dean of Faculty Affairs and Inclusion, College of Engineering and Professor



Congratulations Spring 2022 graduates! You have proven you're ready for the journey ahead.

- Hal S. Tharp, Associate Department Head and Associate Professor



Congratulations on a job well done! Throughout your career stay optimistic, keep an open mind, and be a role model for others.

- Raymond Kostuk, Professor

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FACULTY REMARKS



Congratulations Class of 2022! We are so proud of your achievements!

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



Congrats, ECE Class of 2022!

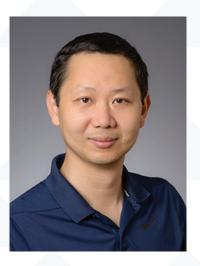
May the knowledge and
experiences you acquired at
UA guide you to helping build a
better world!

- Boulat Bash, Assistant Professor



Congratulations on your achievement! You did a great job. Best wishes for a rewarding and successful career!

- Dale Hetherington, Professor of Practice



Congratulations on your graduation and best wishes for your next adventure!

- Siyang Cao, Assistant Professor



Congratulations, ECE Class of 2022! You've worked hard to achieve your goals and I hope you will continue to apply yourselves, dream new dreams, seek new experiences, embrace life with passion, and keep reaching for new heights. I am proud of you and wish you all the best on your next adventure.

- Tosi Adegbija, Associate Professor



Congratulations to the most resilient graduates in ECE history!

- Bane Vasić, Professor

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CORE FACULTY



Tosiron Adegbija Associate Professor

high-performance embedded computing • low-power embedded systems design



Steven L. Dvorak

Professor

geophysical applications of electromagnetics • optics • applied mathematics



Ali Akoglu *Professor*

high-performance computing • reconfigurable computing • adaptive hardware systems



Wolfgang Fink

Edward & Maria Keonjian Endowed Chair and Associate Professor

artificial vision • autonomous robotic space exploration • biomedical sensors



Boulat Bash Assistant Professor

applying information theory to practical problems of reliability and security



Liesl Folks

Senior Vice President for Academic Affairs and Provost and Professor

magnetic materials and devices • nanoscale metrology • spin-electronic devices



Ali Bilgin Associate Professor

signal and image processing • data compression • magnetic resonance imaging



Salim Hariri *Professor*

autonomic cybersecurity • big data analytics • resilient cloud services



Tamal BoseDepartment Head and Professor

adaptive filtering • spectrum sensing • cognitive radios • channel equalization



Gregory Heileman

Vice Provost for Undergraduate Education and Professor

data science • machine learning



Siyang CaoAssistant Professor

radar signal processing • adaptive radar systems • innovative sensing systems



Dale Hetherington

Professor of Practice

electronic circuits • embedded microcontrollers • semiconductor processing



Gregory Ditzler

Associate Professor

scalable feature selection • applied machine learning to comparative metagenomics



Raymond Kostuk

Professor

optics • photonics



Ivan B. Djordjevic

Professor

optical communications and networks • quantum information processing



Marwan Krunz

Regents Professor and Kenneth Von Behren Endowed Professor

wireless networks • cognitive and softwaredefined radios • MIMO communications



Professor network security • algorithms • network optimization • wireless communications

Loukas Lazos



University Distinguished Professor design and analysis of complex systems • modeling and computer simulation

Jerzy W. Rozenblit



Mina Li Associate Professor information security and privacy • wireless networking • cybersecurity



Ravi Tandon Litton Industries John M. Leonis Distinguished Associate Professor

information and coding theory • wireless communications • machine learning



Michael W. Marcellin Regents Professor and International Foundation for Telemetering Professor



Ratchaneekorn "Kay" Thamvichai Professor of Practice

digital signal processing • communications



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

data compression • signal processing



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



Kathleen Melde Associate Dean of Faculty Affairs and Inclusion, College of Engineering and Professor

antennas for computing • wildlife tracking •



digital communications • error correction codes • memory and storage systems • quantum error correction



Kelly Simmons-Potter Professor

microwave circuit design

response of optical materials and devices to ionizing and non-ionizing radiation



Hao Xin Professor

Bane Vasić

Professor

microwave • millimeter-wave and THz devices • circuits • antennas



Jeffrey J. Rodriguez Associate Professor

signal-image-video processing and analysis • automated image analysis



Quntao Zhuang Assistant Professor

quantum information processing • quantum optics



Janet Meiling Roveda

Professor

smart grid and smart home • VLSI systems for biomedical applications • multicore design





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