



The University of Arizona, Department of Electrical and Computer Engineering, P.O. Box 210104, Tucson, AZ 85721-0104 520.621.6193 | communications@ece.arizona.edu | ece.engineering.arizona.edu

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32 Core Faculty

The University of Arizona is an equal opportunity employer. We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. The University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.

# **CONGRATULATIONS! YOU MADE IT.**

Dear Graduates,

It is with great joy and pride that I extend my heartfelt congratulations to the outstanding Class of 2025 in the Department of Electrical and Computer Engineering!

Earning a degree in ECE is no small feat. Your path has been defined by late nights, challenging labs, innovative projects, and moments of discovery that stretched your thinking and shaped your future. You've shown determination, resilience, and a drive to master the technologies that power our modern world. Today, you stand ready to lead in an era defined by rapid innovation and global interconnectedness.

This year is especially momentous as we celebrate a new chapter in our department's legacy. In addition to our world-class program in ECE, we have successfully launched a new Computer Science and Engineering program and are proud to announce the integration of the Software Engineering program. As new alumni, you are now part of a dynamic and expanding academic family — one that spans the full spectrum of hardware, systems, Al, algorithms and software. Our collective strength across engineering disciplines will

drive progress and transform industries throughout the tech landscape.

Engineering

Legineering

Legin

As you move forward – whether to industry, graduate school or entrepreneurship – I encourage you to

remain curious, courageous and collaborative. The challenges ahead will demand not only your technical expertise but also your creativity, empathy and adaptability.

Don't forget to stay connected with your alma mater. We look forward to hearing about your achievements, and we welcome your continued engagement as mentors, partners and proud Wildcats.

To the graduates' families, friends, and supporters: Thank you for standing beside these remarkable scholars. Your encouragement made this milestone possible.

Congratulations again, Class of 2025! We can't wait to see the difference you'll make.

Bear Down!

Warm regards,

Michael Wu, PhD, FIEEE

Thomas R. Brown Leadership Chair and Department Head

**Electrical and Computer Engineering** 

University of Arizona

Class of 2025 - 3 -

# **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 Undergraduate Senior **Tyler Wilson** 



Outstanding Graduate Student Vijay Nafria



Outstanding
Graduate Student
Noel Teku



Outstanding
Graduate
Teaching Assistant
Ashley
Tittelbaugh



# **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.



#### Joshua Capel

Major: Electrical and Computer Engineering

Hometown: Gilbert, AZ

Years as EA: 3

#### Undergraduate highlights:

- Undergraduate Lab Assistant for the ECE Department
- Research experience
- Engineering Ambassador

**Plans after graduation:** Joshua has accepted a full-time position as a systems engineer at Textron Systems in Arizona.



#### **Emma Halferty**

Major: Electrical and Computer Engineering

Hometown: Bend, OR

Years as EA: 3

#### **Undergraduate Highlights:**

- SWE member
- · Ski and Snowboarding Club
- The Hiking Club
- Engineering Ambassador

Plans after graduation: Emma has accepted a full-time posias a design engineer at Garmin in Tucson.



Class of 2025

# AWARDS AND ACKNOWLEDGEMENTS CONT'D.

#### 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
Oscar Lopez Fimbres



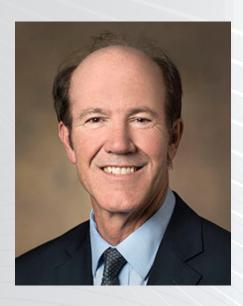
Outstanding Staff
Alexis Vasquez
Undergraduate Academic Advisor



Outstanding Faculty

Dale Hetherington

Professor of Practice



Outstanding Faculty
Hal S. Tharp

Associate Department Head and Associate Professor





# **BACHELOR OF SCIENCE DEGREE**

A

Ishan Adhikari

Ahmad Fahad AlKhezzi

**Abdulwahab Mohammad** 

Al-Qenaei

Abdulaziz Alrandi

Rashed Altammar

Maria Sara Arvizu Velazquez

B

Cameron Alexander Balderrama

**Ethan Wesley Burnett Nguyen** 

C

Juan Francisco Campista

Joshua A. Capel

Alex Caulin-Cardo

**Alexander Charles Choi** 

**Omar Corona Ramos** 

D

**Brielle DeFrangesco** 

Jorge A. Del Rio

**Enoch Zachariah Dew** 

Ashlee Sokha Diggles

Ξ

Alicia A. Enriquez

**Darwin Javier Escobar** 

F

Gao Fan

**Brian Alberto Flores** 

G

Seven Mathew Gilbert

Н

Aliah Morgan Haigh

Emma K. Halferty

**Emma Grace Heckert** 

Alexa Hoover

J

Eli Jacobson

K

Joshua Connor Kimble

**Derek Ethan Kropp** 

**Alex Zong Liang** 

M

**Ahmad Malik** 

Mason Davis Marrero

**Dalian Meraz** 

Ali Abdulwahab Mohammad Ali

#### N

Wesley Michael Newman Anh D. Nguyen Thuan Minh Nguyen

#### P

Jimmy Edward Payan Angel D. Perez Vaidehi Pujary

#### Q

Alfani Quintero Rivera

#### R

Ryan Charles Raad
Jeffrey Christopher Richardson
Sebastian J. Robinson
Raymond Martinez Robles
Cole Ronald Rogers
Alejandro Romero-Lozano

### S

Raul Alejandro Santos
Anthony John Saunders
Tej Ferron Scott
Andrew Michael Smith
Hannah Alexandra Spallas
Logan Stonehouse

#### Т

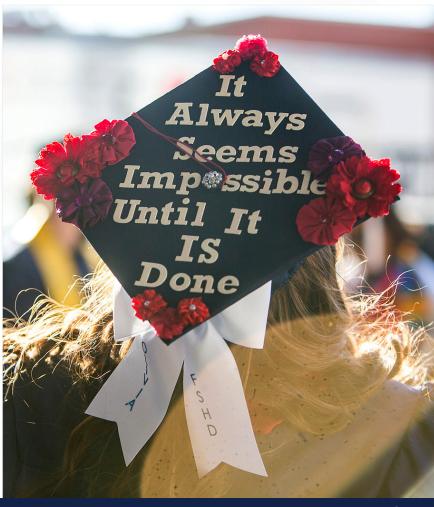
Tyler R. Thursby Robert A. Tkaczyk

#### W

Matthew Robert Wasko
Jake Andrew Weithas
David Parker Wigton
Tyler M. Wilson
Zachary Ethan Wollerman
Jhih-Yang Wu



**Ethan Matthew Yock** 



Class of 2025

# BACHELOR OF SCIENCE DEGREE CONT'D.





A

Virginia Angel

B

Maya Anggun Beer

E

Joshua Matthew Eliasaputra

G

Kenjie Aaron Gozali

Н

Muhamad Amin Hafidz Paphavin Tris Hartono

N

**Ahmad Nurfais** 

O Bryan Orlando

#### P

Bryan Riconga Panjinata Irfan Yuliana Putra

# R

Altsa Hendranur Rahman Widitra Nararya Rama

# S

Matthew Nathaniel Sutanto Nisrina Rahma Syaifullah

U

Axel Mahadriyana Ukar

V

Rohit Jathniel Vasandani

Y

**Erwin Yonata** 



Class of 2025 - 11 -

# **MASTER OF SCIENCE DEGREE**

#### A

Adrian Aguilar Miranda Raghad Saad Alabagi

#### B

Trevor Eugene Bailey Kevin J. Barnett Steven Beck Ryann Buloe

#### C

Jaeden Wolf Carpenter
Brian Castellanos
Md Muhtasim Alam Chowdhury

#### D

Alexandra Kylie Daily

# Ε

Luis Gerardo Estrada

#### F

**Leah Paige Feltham** 

#### G

Harley Charles Gladysz Jose Isaac Gongora

# Н

Timothy Daniel Haines
Malcolm Ulysses Hayes
Jason Crandler Heiman
Austin Joseph Hinton

#### J

Quentin N. Johnson

#### K

Adam Kenneth Kosinski Steven J. Koyrakh

Jacob Mark Landsiedel
Oscar Jonathan Lopez Fimbres

# M

Abiel Leon Barrion Marquez
Pavel Joseph Mazza
Gavin Scott Mitchell
Ashley A. Moshkriz

#### N

Nikhil Nair Ameer Ghasem Nessaee 0

**Julia Christine Otto** 

P

Kory Pearson
Aidan Mark Choe Petri

R

Jazael Ramos

Joshua Christian Reuter

S

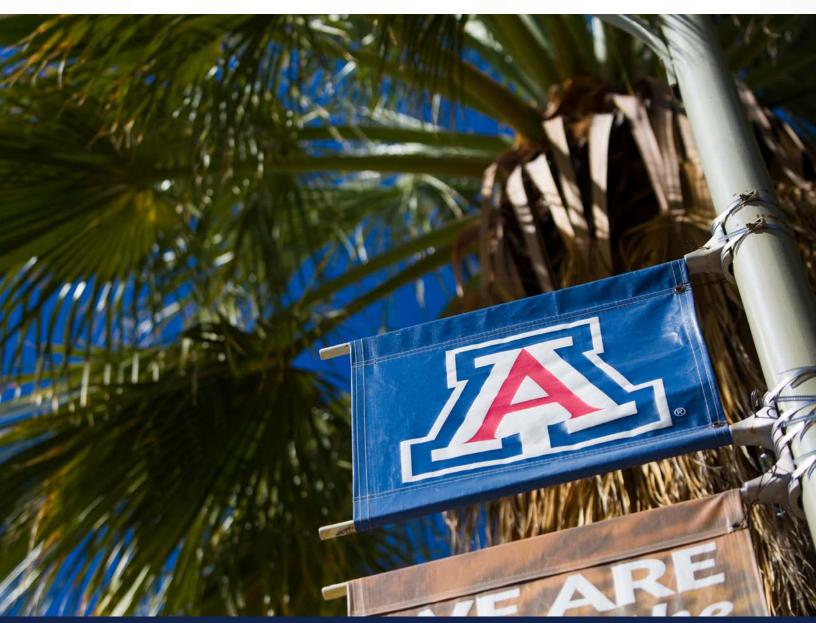
**Owen Sowatzke** 

T

Jimmy Tran
Stephanie Doris Tsang

U

Vijayapandian Unnikrishnan



Class of 2025 - 13 -

# **DOCTOR OF PHILOSOPHY DEGREE**

A

Sudarshan Adiga

Eze Ahanonu

Almutasim Billa Abdullah Alanazi

**Ibrahim Almazyad** 

B

**Kyle Robert Boyer** 

C

**Ping Chang** 

Lei Cheng

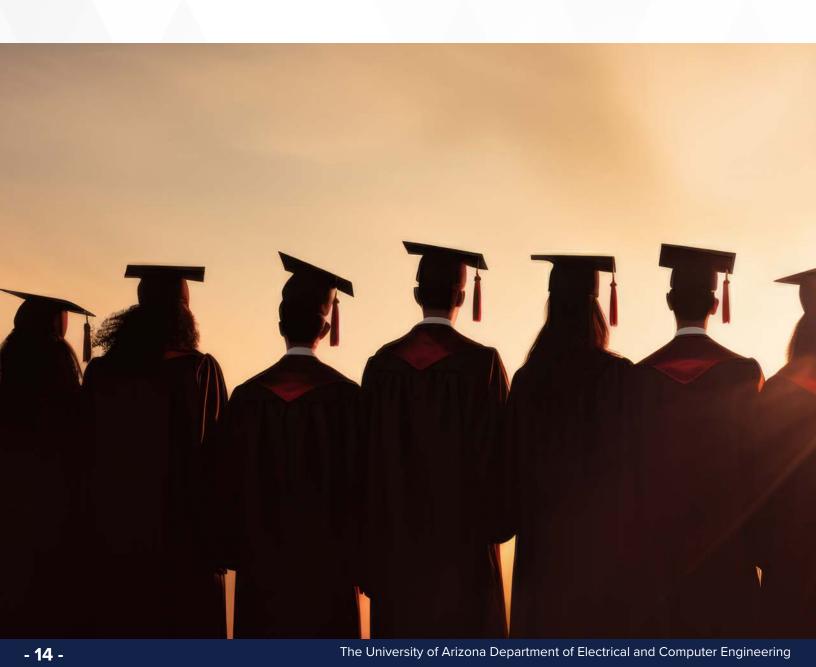
Jude Larbi Kwesi Coompson

Ξ

Safwan Ahmed Elmadani

F

Jesse Friedbaum\*



G

Zhiwu Guo

L

Yuchao Liao

N

Vijay Nafria

T

Noel Hagos Teku

W

**Stone Wilkes** 

\*PhD, applied Mathematics



# **CLASS OF 2025 REMARKS**

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

# **BACHELOR OF SCIENCE**

# Maria Arvizu Velazquez



John 15:4 Hunter Hunter E148 16:57-17:25

#### **Omar Corona Ramos**



"Sometimes it is the people no one can imagine anything of, who do the things no one can imagine." -Alan Turing

Pursuing a graduate degree.

#### Alex Caulin-Cardo



Pursuing an MS in ECE at U of A.

#### Jorge Del Rio



"When something is important enough, you do it even if the odds are not in your favor." - Elon Musk

Pursuing an MS in ECE.



#### **Enoch Dew**



"Almighty God, who has created man in Thine own image, and made him a living soul that he might seek after Thee, and have dominion over Thy creatures, teach us to study the works of Thy hands, that we may subdue the earth to our use, and strengthen the reason for Thy service; so to receive Thy blessed Word, that we may believe on Him whom Thou has sent, to give us the knowledge

of salvation and the remission of sins." - James Clerk Maxwell

#### **Dalian Meraz**



"I'm grateful to have made so many friends with different interests and backgrounds during my time in college. They've helped broaden my view of the world in ways I never expected, from the movies I watch and the music I listen to, to the knowledge I've gained in subjects like math, science, and physics. I'm thankful to have surrounded myself with smart, inspiring people

who have helped shape me into the person I am today."

Pursuing PCB design.

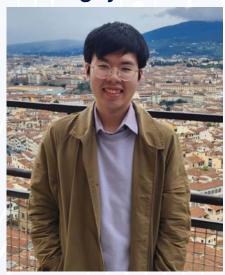
#### **Emma Halferty**



"Thank you to my friends and family for making these past four years possible. I would especially like to thank my parents for their endless love, support and encouragement. To my amazing brother and sister, and my three wonderful roommates - I couldn't have done it without any of you. Thank you, University of Arizona, for an amazing 4 years!"

Accepted a design engineer position at Garmin in Tucson.

#### Jack Nguyen



"Nobody ever figures out what life is all about, and it doesn't matter. Explore the world. Nearly everything is really interesting if you go into it deeply enough." - Richard Feynman

Pursuing an MS in ECE at U of A.



Class of 2025 - 17

# **CLASS OF 2025 REMARKS CONT'D.**

#### Alfani Quintero Rivera



"All our dreams can come true if we have the courage to pursue them" - Walt Disney

"I plan to work for a company that will allow me to work in sustainable power generation."

#### **Sebastian Robinson**



Accepted a position at Leonardo Electronics in Tucson and pursuing an MS degree in ECE.

# Ryan Raad



#### **Tyler Wilson**



"A man who can laugh at himself is truly blessed, for he will never lack for amusement." -James Carlos Blake

"Engineering has always been a great source of joy for me and I am thankful for all of those who have enabled me to pursue my passion. I hope to continue bettering myself and my ability to help others find their

own success. And to everyone that knows me now, keep me humble. It is far too easy to insult others for where they are if you can't turn around and laugh at your past mistakes."





#### MASTER OF SCIENCE

#### Raghad Alabagi



"My success is only by Allah." – Qur'an 11:88

"The ones who raised me, and the prayers we made — they brought me here."

Accepted a product engineer position at Texas Instruments.

#### **Quentin Johnson**



"It's the end of my journey as a student of the University of Arizona - I'm grateful for the support and successes I've experienced throughout the years. May the challenges dwindle and give way to a more hopeful tomorrow!"

Currently working fulltime as an electrical engineer.

#### Md Muhtasim Alam Chowdhury



MS Thesis: Mitigating Device-Level Vulnerabilities in Post-CMOS Machine Learning Accelerators

Advisor: Soheil Salehi

"Make yourself comfortable with what makes you uncomfortable." This advice, shared by a speaker at a seminar, became a personal mantra. It taught me how to turn my

weaknesses into strengths through perseverance and growth.

Originally from Bangladesh, I'm proud to have reached this milestone. I'm deeply grateful to my parents and my wife for their unwavering support. My father always dreamed of our happiness and I dedicate this degree to my parents, whose sacrifices made this journey possible."

Pursuing a PhD at the U of A.

#### Steven Koyrakh



"Like the most finely tuned RF network, success is built on the combination of effort, curiosity, and perseverance. Every challenge in RF engineering—from taming nonlinear device behaviors to sculpting bandwidth-efficient filter responses teaches us about science and ourselves. Through meticulous measurement, iterative design, and relentless

learning, I'm not just chasing better S-parameters and flatter response curves

but forging the resilience and innovation that fuel every future project."

Accepted a position as an RF engineer, building and pushing the boundary on next level technology.

# **Oscar Jonathan Lopez Fimbres**



"Quiero agradecer a toda mi familia por su apoyo y amor incondicional. Hubo muchos sacrificios, no solo míos, sino de muchas personas, para que yoesté aquí hoy logrando esta meta. Llevo este logro con humildad, consciente de todo el esfuerzo que lo hizo possible."

Accepted a position at RTX in Tucson.

# **Ashley Moshkriz**

"Sometimes the questions are complicated and the answers are simple."

Accepted an electrical engineer position at Freeport-McMoRan.



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# **CLASS OF 2025 REMARKS CONT'D.**

# **DOCTOR OF PHILOSOPHY**

#### **Sudarshan Adiga**



Dissertation Title:
Detection and
Decoding: New
Learning-Based
Algorithms and Their
Fundamental Limits

Advisor: Ravi Tandon

"It is better to fail aiming high than to succeed aiming low, so that even failure will have in it an echo of glory." - Bill Nicholson

Accepted a position at

Marvell Semiconductor in Santa Clara, CA.

#### Ibrahim Almazyad



Dissertation Title: Design, Analysis, and Evaluation of highly secure smart city infrastructures and services.

Advisor: Salim Hariri

"Forever grateful to the incredible staff and faculty at the University of Arizona for their unwavering support, guidance, and inspiration throughout my PhD journey. Your

dedication made this achievement possible. Proud to be a Wildcat! #BearDown"

Accepted a position at Qassim University, Saudi Arabia.

#### Almutasim Billa Alanazi



Dissertation Title:
Enhancing Safety and
Efficiency for Control
Systems Based on
Reinforcement Learning

**Advisor:** Hal S. Tharp

"I am grateful to Allah for my success! Then I want to express my heartfelt thanks to my family—my wonderful father, Dr. Abdullah, and my mother, Fatimah, my lovely wife, Afnan, my supportive brothers

Mohammed and Fares, and my awesome sister, Abrar. I also want to thank my advisor, Dr. Hal Tharp, my committee members, Dr. Jerzy Rozenblit and Dr. Pratik Satam, and special thanks to my government, Saudi Arabia, for the scholarship and to U of A for an exceptional education.

Planning to become a university faculty member, pushing boundaries to innovate, transform, research, and create modern solutions to engineering challenges.

#### Lei Cheng



Dissertation title:
Perception with
Sensor Fusion: From
Calibration to Object
Detection and Tracking

**Advisor:** Siyang Cao

"It's strange—just when I feel that something is impossible or all hope is lost, a turning point always seems to appear. So, never give in to despair; nothing is ever truly impossible."

Pursuing a postdoc at UMD, College Park, MD.

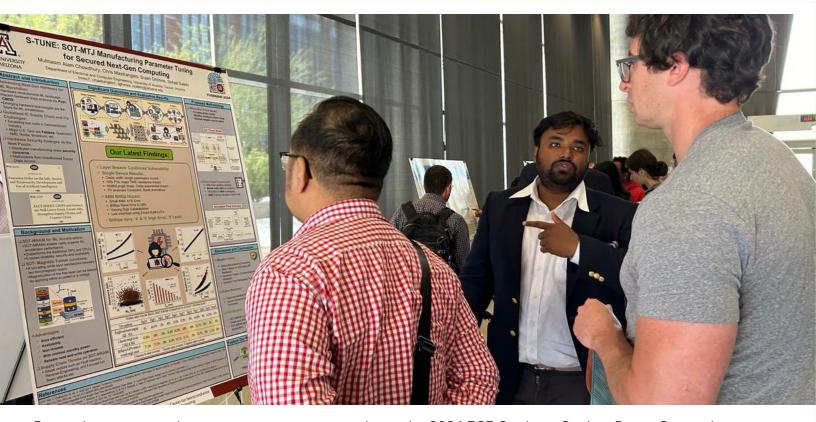


# **ECE MEMORIES**

Some of the Class of 2025 graduates' favorite ECE memories.



Turning Up the Heat: Engineering Success in Pyrolysis Oil Refinement! — Alfani Quintero Rivera



Presenting my research on secure next-gen computing at the 2024 ECE Graduate Student Poster Symposium was an unforgettable moment of sharing ideas, connecting with peers and receiving the Best Poster Design Concept award.

— Md. Muhtasim Alam Chowdhury



A memorable moment with my incredible Ph.D. committee after successfully passing my defense!

— Almutasim Billa Alanazi



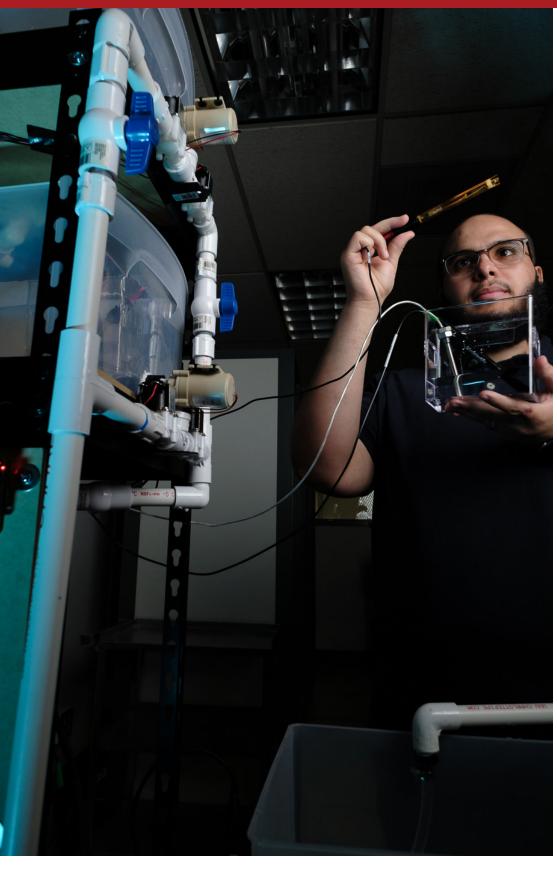
Finishing my Senior design Piezo Array. — Dalian Meraz



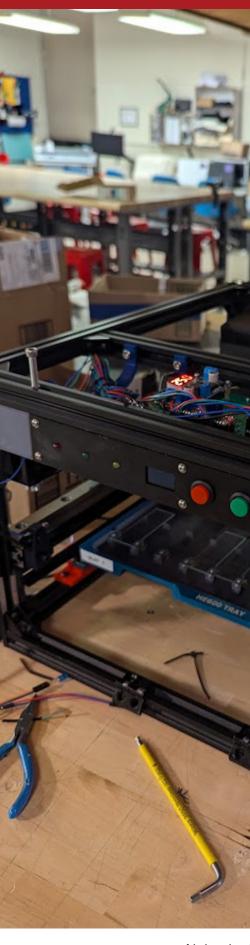
Picture of Golf Putting Robot Senior Design Project
— Tyler Wilson

Class of 2025 - 25 -

# **ECE MEMORIES CONT'D.**



This photo captures a memorable chapter at the ACL Lab, where I spent countless hours developing cybersecurity solutions to protect our city's drinking water from cyberattacks. Building this highly specialized testbed challenged me, sharpened my skills, and taught me invaluable lessons about resilience and innovation. Forever grateful for this enriching experience and proud to contribute to safeguarding critical infrastructure! — Ibrahim Almazyad



Alejandro





Romero-Lozan

Doing lab things. — Jorge Del Rio

Class of 2025 - 27 -

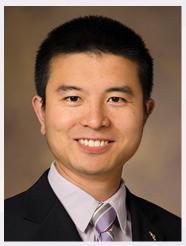
# **FACULTY AND STAFF REMARKS**



Dr. Ehsan Azimi's XR class working on their hands-on projects using smart glasses.

You imagined it, built it, lived it. Now go extend your reality beyond the classroom!

Ehsan AzimiAssistant Professor



Congratulations on your graduation, class of 2025! I wish you the best in your future careers.

-— Ming Li Professor



Congratulations on your accomplishments at the U of A! Let the fun (of applying your skills in your workplace) begin.

Narayanan RengaswamyAssistant Professor



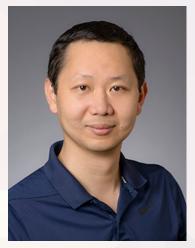
Congratulations Class of 2025! The future is yours to create so keep pushing boundaries, stay curious, and make a positive impact through your work.

Soheil SalehiAssistant Professor



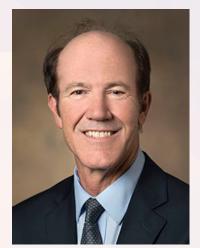
Congratulations Class of 2025. Best wishes for your future careers.

Ratchaneekorn "Kay"ThamvichaiProfessor of Practice



Congratulations, ECE Class of 2025! I'm proud of your hard work and wish you all the best in your next chapter!

Siyang CaoAssociate 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



Best Wishes, Graduates.

Kathleen Melde
 Associate Dean of Faculty
 Affairs and Professor



Congratulations and good luck in your future endeavors!

Michael W. Marcellin
 Regents Professor



Heartfelt congratulations on your success and warm wishes for the next steps in your professional and personal journeys.

Jerzy W. Rozenblit
 University Distinguished
 Professor



Congratulations, UA ECE graduates! Wishing you all a successful future.

Hal S. Tharp
 Associate Department Head and Associate Professor

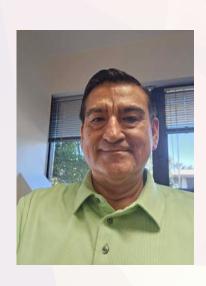
Class of 2025 - 29 -

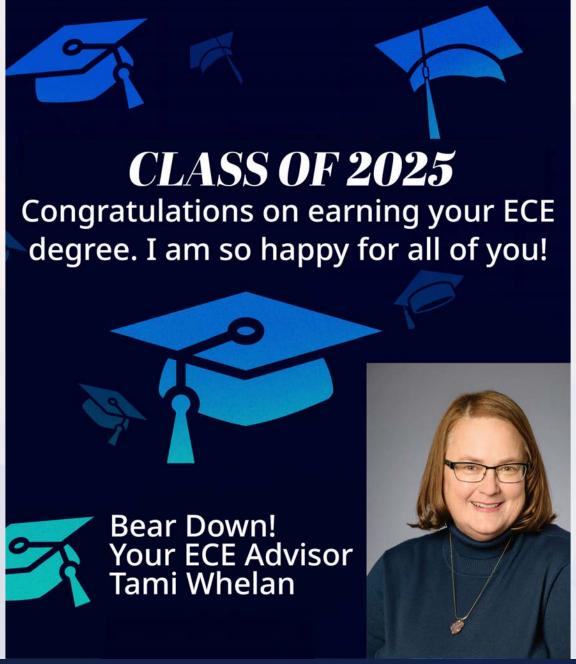
# **FACULTY AND STAFF REMARKS CONT'D.**



Congratulations Class of 2025! Your success in ECE is inspiring. Wishing you all the best. Beardown!

Rozanne Canizales
 Assistant to Department
 Head and Administrative
 Manager





So many wonderful student memories with you all!
Best wishes for the future careers, Class of 2025.

— Jorge Camarillo Graduate Academic Advisor



Congratulations Class of 2025! It has been a pleasure seeing you grow and progress towards achieving all your ECE goals. Wishing you continued success in your careers and on into the future!

Keli Brinke
 Administrative Associate

# CONGRAIS CONGRAUSI CONGRAUSI Cheers to the Class of 2025! You've turned late nights and big dreams into something real. The world is wide open—go chase it with everything you've got!

Class of 2025 - 31 -

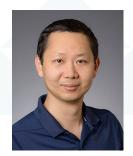
-Alexis Vasquez

# **CORE FACULTY**



Mai Abdel-Malek Assistant Professor of Practice

logic design • embedded microcontroller • programming languages • wireless communication



**Siyang Cao** Associate Professor

radar signal processing • adaptive radar systems • innovative sensing systems



**Tosiron Adegbija**Director of Graduate Studies and
Associate Professor

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



Jyotikrishna Dass Assistant Professor

distributed machine learning • edge AI • systems architecture for high-performance machine learning



**Ali Akoglu** *Professor* 

high-performance computing • reconfigurable computing • adaptive hardware systems



Ivan B. Djordjevic

Professor

optical communications and networks • quantum information processing



**Ehsan Azimi** Assistant Professor

• extended reality • robotics • humancentered design



Wolfgang Fink

Associate Professor and inaugural Edward & Maria Keonjian Endowed Chair

artificial vision • autonomous robotic space exploration • biomedical sensors



**Boulat Bash** Associate Professor

information theory to practical problems of reliability and security



**Liesl Folks** 

Professor

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



**Ali Bilgin**Associate Professor

signal and image processing • data compression • magnetic resonance imaging



**Christos Gagatsos** 

Assistant Professor

quantum information and optics • probability theory and coding • applied mathematics • electromagnetism



Professor

autonomic cybersecurity • big data
analytics • resilient cloud services

Salim Hariri



Professor
information security and privacy • wireless networking • cybersecurity

Ming Li



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



**Bo Liu**Associate Professor
reinforcement learning and control • explainable AI • safe AI



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



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

**Abhijit Mahalanobis** 

Michael W. Marcellin

Michael M. Marefat



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



Regents Professor and International Foundation for Telemetering Professor digital communication and data storage systems • data compression • signal processing



Loukas Lazos
Professor

network security • algorithms • network optimization • wireless communications



Associate Professor
intelligent systems • computer vision
and robotics • machine learning



Assistant Professor

Computer vision• signal and image processing•medical image analysis•machine learning•deep learning•embedded systems

**Eung-Joo Lee** 



**Kathleen Melde** Associate Dean of Faculty Affairs and Professor

antennas for computing • wildlife tracking • microwave circuit design

Class of 2025 - 33 -

# **CORE FACULTY CONT'D.**



**Kelly Simmons-Potter** Associate Dean of Academic Affairs, College of Engineering and Professor

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



**Soheil Salehi** Assistant Professor

hardware and Al-enabled security • signal conversion and processing • Al hardware • computer architectures • VLSI circuits



**J. Ubaldo Quevedo** *Professor of Practice* 

information retrieval • data management • machine learning • computer algorithms



**Ravi Tandon**Litton Industries John M. Leonis
Distinguished Professor

information and coding theory • wireless communications • machine learning



Narayanan Rengaswamy Assistant Professor

classical and quantum error correction • quantum computing • information theory • signal processing



Ratchaneekorn "Kay" Thamvichai

Professor of Practice

digital signal processing • communications



**Jeffrey J. Rodriguez**Director of ECE Online Programs
and Associate Professor

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



Hal S. Tharp

Associate Department Head and Associate Professor

control theory • engineering education



Janet Meiling Roveda

Professor

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



Bane Vasić

Professor

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



Jerzy W. Rozenblit

University Distinguished Professor

design and analysis of complex systems
modeling and computer simulation



Michael Wu

Thomas R. Brown Leadership Chair, Department Head and Professor

cybersecurity • mobile computing • wireless networks • computer communications



Hao Xin

Professor

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



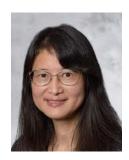
Assistant Professor

machine learning • artificial intelligence
• computer organization



**Han Xu**Assistant Professor

machine learning • artificial intelligence • robustness • privacy • fairness



**Danella Zhao**Associate Professor

computer architecture • cybersecurity • embedded system design



Class of 2025 - 35 -





