

THE UNIVERSITY OF NEW MEXICO SCHOOL OF ENGINEERING

FALL CONVOCATION



Saturday, December 18, 2021

Kiva Auditorium, Albuquerque Convention Center

Message from the Dean

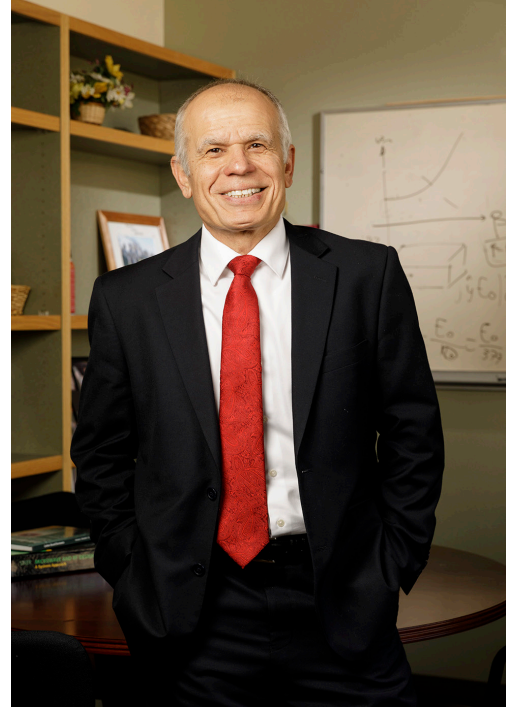
To the Fall 2021 University of New Mexico School of Engineering Graduates

Welcome to the Fall 2021 University of New Mexico School of Engineering Convocation. After two years, I am extremely proud to say that we are finally holding an in-person Convocation ceremony, which helps us feel a little more normal in these abnormal times!

This is an especially joyous occasion to see all of our graduates and their families in person, even if we are all wearing masks and still continuing to take precautions. The last couple of years have been challenging for all of us — students, staff and faculty — as we have tried our best to navigate life during a pandemic while still providing the best educational and research opportunities possible. To see all the graduates here today is proof that we have succeeded in spite of the challenges. Earning an engineering or computer science degree is always challenging, but life during the pandemic has made every aspect of life more difficult, so to the students graduating this year who have persevered, we are especially proud of your hard work, dedication and unfaltering belief that there are better days to come.

Because no one earns a degree in a vacuum (even if you are socially-distanced), we recognize and thank all of the family, friends, teachers, professors, classmates, colleagues, coworkers and advisors who helped make this day possible. This could not happen without everyone's efforts.

Graduates, we welcome you to the distinguished company of the School of Engineering alumni and can't wait to see the many ways in which you will make a difference in the world.



Handwritten signature of Christos Christodoulou in blue ink.

Christos Christodoulou

Jim and Ellen King Dean of Engineering and Computing

FALL CONVOCATION

UNIVERSITY OF NEW MEXICO SCHOOL OF ENGINEERING

SATURDAY, DECEMBER 18, 2021 • 2 P.M.

Kiva Auditorium, Albuquerque Convention Center

BOARD OF REGENTS

The laws of New Mexico provide for a Board of Regents which is responsible for the governance of The University of New Mexico. The Board's power to govern the University includes fiduciary responsibility for the assets and programs of the University, establishment of goals and policies to guide the University, and oversight of the functioning of the University.

The Board is comprised of seven members who are appointed by the governor of New Mexico, with the consent of the Senate, for staggered terms of six years except for the student regent, who is appointed for a two-year term. The governor and the secretary of education are designated as ex-officio, non-voting members.

The Regents

Douglas M. Brown, Chair

Kimberly Sanchez Rael, Vice Chair

Sandra K. Begay, Secretary-Treasurer

Jack L. Fortner

William H. Payne

Robert L. Schwartz

Randy Ko, Student Regent

TABLE OF CONTENTS

Message from the Dean.....	1
Board of Regents	2
Convocation Program.....	3
Platform Party	4
Convocation Traditions	5
Keynote Speaker	6
Student Speakers	7-8
Breece Award	9
Degrees Awarded.....	10
Electrical & Computer Engineering.....	11
Mechanical Engineering.....	12
Nuclear Engineering.....	13
Chemical & Biological Engineering	13
Civil, Construction & Environmental Engineering.....	14
Computer Science	15
Interdisciplinary Programs Biomedical Engineering.....	16
Nanoscience and Microsystems Engineering.....	16
Thank you to our supporters	17
Information for Alumni.....	18

Convocation Program

Processional

FACULTY MARSHAL

Anil Prinja, Professor Emeritus, Nuclear Engineering

BANNER CARRIER

Carol Jimerson, Electrical and Computer Engineering

PROCESSIONAL MUSIC

“Pomp and Circumstance March Number 1,” Composed by Sir Edward Elgar

“Procession of the Nobles,” Composed by Nicolai Rimsky-Korsakov

Performed by The New Mexico Brass Quintet

MASTER OF CEREMONIES

Charles B. Fleddermann, Associate Dean for Academic Affairs and Community Engagement

KEYNOTE SPEAKER

Atul Bhatnagar, M.S., Electrical Engineering '82

STUDENT SPEAKERS

Gemma Strong, M.S., Nuclear Engineering '21

Connor Smith, B.S., Civil, Construction and Environmental Engineering '21

PRESENTATION OF BREECE AWARD

Presenter: Edl Schamiloglu, Associate Dean for Research and Innovation

Awardee: Dinh Nguyen, Electrical and Computer Engineering '21

PRESENTATION OF DEGREE CANDIDATES

Charles B. Fleddermann, Associate Dean for Academic Affairs and Community Engagement

RECESSIONAL

Platform Party

UNIVERSITY OF NEW MEXICO ADMINISTRATION

James Holloway, Provost and Executive Vice President for Academic Affairs

Julie Coonrod, Dean, Graduate Studies

SCHOOL OF ENGINEERING ADMINISTRATION

Christos Christodoulou, Dean, School of Engineering

Charles B. Fleddermann, Associate Dean for Academic Affairs and Community Engagement

Edl Schamiloglu, Associate Dean for Research and Innovation

Abhaya Datye, Chair, Department of Chemical and Biological Engineering

Mahmoud Taha, Chair, Department of Civil, Construction and Environmental Engineering

Darko Stefanovic, Chair, Department of Computer Science

Michael Devetsikiotis, Chair, Department of Electrical and Computer Engineering

Yu-Lin Shen, Chair, Department of Mechanical Engineering

Hyoung K. (Hank) Lee, Chair, Department of Nuclear Engineering

Linnea Ista, Biomedical Engineering Program

Sang M. Han, Nanoscience and Microsystems Engineering Program

FACULTY MARSHAL

Anil Prinja, Professor Emeritus, Nuclear Engineering

KEYNOTE SPEAKER

Atul Bhatnagar, M.S., Electrical Engineering '82

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Gemma Strong, M.S., Nuclear Engineering '21

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Convocation Traditions

Throughout their long and proud history, universities have retained and cherished strong ties to their ceremonial roots. When English universities were taking form in the 12th and 13th centuries, scholars were also clerics. They adopted robes similar to those of their monastic orders. Caps were a necessity in the drafty buildings, and copes, or capes with hoods attached, were needed for warmth.

School of Engineering Convocation

The School of Engineering Convocation pays tribute to the history and traditions of graduations throughout the ages. The bachelor's gown is red, has long sleeves, and is worn closed. The master's and doctor's gowns are black. The cap, originally round, is now a square mortarboard and is the same for all degrees. Caps are traditionally black with a long tassel fastened to the mid-point. The tassel is worn on the right side until the degree has been conferred; it is then worn on the left. The hood indicates the type of degree and the official color or colors of the university conferring the degree. For example, the color orange represents engineering, and that color is used on the velvet binding or edging of the hood. The official University of New Mexico colors are cherry and silver, so the hood is lined with silver gray with a chevron of cherry red.



The Convocation begins and ends with a colorful academic procession, led by a staff member carrying a banner in front of the School of Engineering degree candidates. The faculty marshal is usually selected from School of Engineering emeritus faculty, an honorary title for retired full-time faculty. The faculty marshal carries a mace or ceremonial staff and leads the platform party, composed of School of Engineering academic leadership, UNM regents and dignitaries, and convocation speakers.

The mace traces its origins to a medieval weapon and was later carried before kings and high church officials as a ceremonial emblem of authority. The current mace was created by Peter Vorobieff, a professor of mechanical engineering, staff member Jason Church, and student Daniel Freelong. It is made of steel and leather, similar to the maces used during the siege of Valetta (1565) by combat engineers.

Keynote Speaker

Atul Bhatnagar

M.S., Electrical Engineering '82

When Atul Bhatnagar arrived in Albuquerque in July 1981, it was his first time in the United States. In fact, it was his first flight ever — from New Delhi to Frankfurt, Germany; to Atlanta; then to Albuquerque. He knew no one and owned very little. “My net worth was negative,” he recalls.



But soon, he would be embarking on a fantastic educational journey that would change his life.

Bhatnagar earned a bachelor’s degree in electrical engineering from Birla Institute of Technology and Science in India, but made the trek to the United States for graduate studies, choosing UNM for its excellent reputation in academics and faculty in the Department of Electrical and Computer Engineering. “They had a great microprocessor lab under Dr. Knudsen. I wanted to be a TA in that state-of-the-art lab.”

He received his master’s degree in electrical and computer engineering from UNM in 1982 and since 2013 has been president and CEO of Cambium Networks, a public company whose goal is to create wireless communication products and help eliminate global digital divide by providing broadband connectivity in over 150 countries.

Bhatnagar said that his time at UNM prepared him to be the leader he is today. “I give UNM credit for the development of who I am today,” he said.

That education allowed him to jump immediately into the rapidly evolving high-technology sector. In 1982, he joined Tektronix in Oregon, then moved into a variety of positions in Silicon Valley after 1985. He was with Hewlett-Packard Company until 2000 in many senior management roles. From 2000 to 2006, he was vice president and general manager at Nortel Networks in Silicon Valley leading the Enterprise Data Networks division. He then made the jump to Ixia Communications, where he served as president and CEO.

Looking back on his career, he said he has made continuous learning the main focus of his journey. “It has been a tremendous journey from engineer to CEO,” he said. “I never think about goals, but about skills, and every three years, I keep adding a new skill. “The world is changing so fast, you have to keep educating and developing yourself continuously.”

And he has done just that. In addition to his two degrees, he earned an Innovation and Entrepreneurship Certificate from Stanford University in 2015 and also took executive development courses at Harvard Business School in 2015 and 2016 earning a certificate in effective board management. In 2020, he was honored by the School of Engineering with a Distinguished Alumni Award for the Department of Electrical and Computer Engineering.

Bhatnagar is married to Ranjana. The couple has five children: two sons, Ashish and Munish, and three daughters, Vaishali, Vasudha and Radhika. In his spare time, he enjoys gardening, going for long walks with his dog Kona, and using a telescope at night to gaze at the sky.

Student Speakers

Connor Smith

B.S., Civil, Construction and Environmental Engineering '21

Connor Smith is a native of Boca Raton, Fla., so coming to school in New Mexico was a bit of a culture shock.

“I was used to seeing swamps and the ocean, so New Mexico with the mountains and the desert was very different,” he said.



But he adjusted to the new climate and culture very quickly. He earned an ROTC Navy scholarship in high school and was assigned to UNM for college. Connor said he chose civil engineering because he had relatives in the profession, including his grandfather, who built bridges.

“I enjoyed it seeing it growing up,” he said.

While a student, he was involved in the concrete canoe team. In addition to his military service and being a student, he also works full time at Sandia Peak Tramway.

Connor said his military service was very beneficial to his engineering studies.

“It added a lot in terms of developing my leadership and management experience, as well as meeting deadlines,” he said.

After graduation, Connor will be heading to Charleston, S.C., for six months of training in nuclear theory to work on a nuclear submarine.

In his spare time, he enjoys spending time in nature, especially golfing, hiking and trap shooting.

As part of his ROTC scholarship, he owes the Navy eight years of service, so that will keep him busy for the next several years. Beyond that, he said the future is open.

“I can do a lot with an engineering degree, learning how to solve problems,” he said. “Engineers are always in demand.”

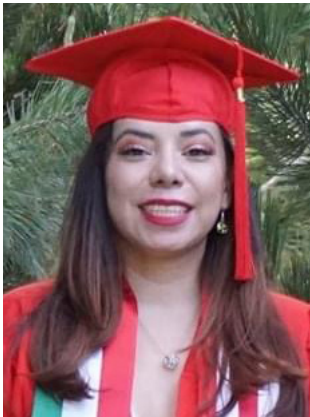
His advice to engineering students is to “get involved in everything you can: clubs, research groups, labs — whatever you can as long as you enjoy it. You’ll make a lot of connections.”

Gemma Strong

M.S., Nuclear Engineering '21

There is nothing in Gemma Strong's life that would have suggested she would become an engineer. In fact, she had almost everything working against her: challenges of language, culture, gender and even family pressure.

"I come from a very conservative Catholic family in Mexico," she says. "Some of my family and friends in Mexico think I'm crazy. They say, 'Why are you going through all this? Come home and be a wife and have kids!'"



But Gemma had other ideas. She's not really sure what pushed her into the STEM disciplines, but despite the fact that her parents never attended college, she made her way north to Albuquerque to UNM, where she was first an astrophysics undergraduate student, but then felt she wanted to have more of an impact on the world ("it was just me alone with my thoughts"), so she switched to nuclear engineering.

She said coming to a different country was a challenge.

"It was very hard to come to this country," Gemma said. "I had to study a lot of English. It was a barrier for me."

She found a close-knit family in the small-but-mighty Department of Nuclear Engineering, including professors and becoming involved in the American Nuclear Society (ANS) student and national chapter activities and leadership.

Gemma enjoyed it so much, she decided to pursue her master's degree through the department, which opens her up to a wide variety of career opportunities. For the last two years, she has been living in Arizona and working full time at the Palo Verde Nuclear Generating Station, where she works an engineer doing reload analysis for the nuclear fuel management area.

Her advice to engineering students is: "Struggling is not a bad thing. You have to work at it and continue on."

In her spare time, she enjoys trying new restaurants. Her future plans include continuing to work at Palo Verde, learning as much as she can.

George E. Breece Award

The George E. Breece Award was established in 1921 to honor the UNM School of Engineering senior with the highest grade-point average from each graduating class. The recipients of this award consistently have grade-point averages higher than 4.0, reflecting a majority of A+ grades throughout their undergraduate courses.

Dinh Nguyen

B.S., Electrical and Computer Engineering '21

Dinh Nguyen grew up in Vietnam and always liked computers and programming, so it's no surprise that he chose computer engineering as a major. He said he found UNM because he had a sister who had attended before him, otherwise he likely never would have found the Land of Enchantment.



Although he knew written English, speaking it and listening to it was challenging. And there was also an adjustment with the climate of New Mexico vs. Vietnam.

“It is very different in New Mexico. It’s drier and hotter here,” he said.

Dinh said he enjoyed his courses, especially the design course with Edward Nava.

“I was on a team with deadlines and got real-world experience,” he said.

He said his most difficult course was signals and systems course, which he took online — presenting new challenges.

“The pandemic changed how I learned,” he said. “It’s easier to get distracted with other things in an online class and have the mindset, ‘Oh, I can learn it later,’ but when you go to class in person, you have to pay attention.”

Getting an above-A grade point average requires a lot of study, which Dinh said he mainly did alone, but occasionally had a partner to review material.

While at UNM, he was a member of IEEE and Tau Beta Pi and has been working at Zimmerman Library. His main hobby is landscape photography.

He said the piece of advice he would give to an engineering student starting out is to “try to have a lot of friends. You can study with them, or just use them for support.”

Next semester, Dinh will continue at UNM in the 4+1 shared-credit degree program, which allows students to complete both a bachelor’s and a master’s degree in five years. He said he looks forward to learning new skills, which will open him up to a lot of possibilities in the future.

Degrees Awarded

Order of Presentation

Department of Electrical and Computer Engineering

Department of Mechanical Engineering

Department of Nuclear Engineering

Department of Chemical and Biological Engineering

Department of Civil, Construction and Environmental Engineering

Department of Computer Science

Biomedical Engineering

Nanoscience and Microsystems Engineering

Optical Science and Engineering

STUDENT HONORS RECOGNITION

"Graduating with Distinction" (symbolized by a + by the student's name) recognizes the exceptional performance of students who graduate with a master's or doctor of philosophy degree. The status is determined at the time of the final examination through agreement of the examining committee members, with final approval given by the department chair.



Electrical and Computer Engineering

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

Derek S. Davidson

Charles B. Ford

Dinh Nguyen

Eric Dixon

Jenilee Jao

Sean A. Pluemer

Ahmed A. Elsayey

Samim A. Khan

Benjamin B. Rutherford

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Arman Allahverdi

Jordan K. Layman

Yoo Jin Park

Kimberly M. Faris

Jacqueline S. Mirabal

Anh M. Tran

Roger H. Holten

Dylan G. Morrison

MASTER OF SCIENCE IN COMPUTER ENGINEERING

Diego E. Chavez

Marshall G. Hundemer

Fisayo M. Sangoleye[†]

Anthony D. Chavez*

Nafis Irtija[†]

Sravani Teeparthi[†]

Amber E. Disher

Jacob E. Jones

Phuong N. Tran

Mario J. Esparza Perez*

Chenxu Liu

Benjamin J. Fogg

Rui Ou

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

Joe M. Chen*

Bradley J. Maynard

John Rose*

Connor W. Halsey

Seth A. Miller*

Paula Van Rooy

Maren W. Hatch*

Santiago A. Monawar

Jamison R. Wagner

Erica M. Hoeffner*

Nikhileswara Reddy Naguru

DOCTOR OF PHILOSOPHY IN ENGINEERING

COMPUTER ENGINEERING

Pavlos A. Apostolopoulos*[†]

ELECTRICAL ENGINEERING

Marios Patriotis[†]

Dimitrios Sikeridis[†]

Nishchay H. Sule*

*Summer 2021 Graduate

[†]Graduating with Distinction

Mechanical Engineering

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Aaditya Acharya

Jesse J. Apodaca

Brittany M. Arviso

Jenai A. Beal-Permel*

Trevor J. Bird

Jose Pablo Casasola

Colston C. Chacon

Kevin B. Duron

Justin T. Fleming

Noah B. Fudge

Luke D. Gray

Edwin L. Guillen

Jonathan A. Hernandez

Kushal Kadel

Brandon S. Kirkpatrick

Bailey Klitzke

Samantha M. Korfe

Chun Yin Lee

Nha-Truc A. Leyva

Dylan J. Marsh

Leticia Mercado

Dylan Metz

Ryan H. Powell

David D. Rusk

Isabella M. Solorza

Phillip Vilensky*

John G. White

MASTER OF SCIENCE IN MECHANICAL ENGINEERING

Mohamed R. Abuhegazy

Nelson G. Amaya*

Anthony T. Chavez

Kyler P. Daniel

Robert E. Ficklin

Daniel Freelong*†

Jacob A. Maestas

Tim A. Murphy

Aaron N. Otto

Joseph M. Pomo

Andrew R. Rizk

Daniel T. Seligman

Isaac J. Seslar*

Amanda R. Sterk

Shawn N. Swanson

Chad E. Walde

James S. Youchison*

DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING

Jafar Ghorbani

*Summer 2021 Graduate

†Graduating with Distinction

Nuclear Engineering

BACHELOR OF SCIENCE IN NUCLEAR ENGINEERING

Alexandria S. Ragsdale*

Flora L. Valdez-Lopez*

MASTER OF SCIENCE IN NUCLEAR ENGINEERING

Malak A. Bani Melhem

Rowdy Davis

Gemma I. Strong

Karissa L. Currie

Dustin H. Dealy

Chemical and Biological Engineering

BACHELOR OF SCIENCE

Elvia G. Cruz

Kassandra M. Legarda*

Lauren A. Ostermann

Yesica V. Garcia*

Jose C. Lopez

Diego E. Rodriguez

Jason P. Heimberger

Zachary L. Montoya*

Daneca C. Varela-Salazar

MASTER OF SCIENCE IN ENGINEERING

Caroline Bouvie

Atsu Atitsogbui

Ryan N. Alcalá

John A. Matteson

*Summer 2021 Graduate

†Graduating with Distinction

Civil, Construction and Environmental Engineering

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Nathan D. Arnold	Benson Long	Geneya S. Sanchez
Sam C. Blaine	Jonathan Lopez	Connor J. Smith
John P. Coose*	Jakeline Lopez Mendez	Veronica N. Varela
Kory W. Holt	Carlos Mendoza	Tamara L. Walker
Tammy N. Huynh	Andrew Nguyen	

BACHELOR OF SCIENCE IN CONSTRUCTION ENGINEERING

Dominica J. Bennett*	Anthony R. Diaz	Jeremy T. Klar
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BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT

Oscar D. Calderon Tena	Aspen G. Headrick	Monica R. Riewe
Sara D. Enriquez	Rubi E. Morales	Aritza Valles
Michael A. Garcia	Stephen C. Pack	
Krystian D. Gomez	Joan Ramos	

MASTER OF ENGINEERING

Ryan Fujii	Curtis J. Hunt*	Guillermo Tarin
Scott M. Garcia	Mariah L. Smith	Tyler S. Zack

MASTER OF SCIENCE IN CIVIL ENGINEERING

Lauren M. Gomez	Angel M. Padilla*	James L. Woodall*
Md Mehedi Hasan*	Patience L. Raby	

MASTER OF CONSTRUCTION MANAGEMENT

Luzcenit Acosta Guio	Paul Aversano	Steven Ramirez
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DOCTOR OF PHILOSOPHY IN ENGINEERING

Biswajit K. Bairgi	Roya Hosseinzadeh Nasimi	Shreya Vemuganti**
Rahulreddy Chennareddy	Gerhard F. Schoener†	Xinxing Yuan
Fei Han	Krishna Chaitanya Jagadeesh	
Daniel Heras Murcia†	Simma*	

*Summer 2021 Graduate

†Graduating with Distinction

Computer Science

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

D M Raisul Ahsan*	Rohit Kathariya Tharu*	Carlos E. Ramos Guereca
Nicholas H. Bacon	Christopher A. Leap	Shania C. Salipan*
Shane M. Bramley	Magnus F. Lindland	Sophia I. Secrest*
Pun Bahadur Chhetri	Nicholas E. Livingstone	Mausam Shrestha
Annel Cota	Nicole A. Martinez	Brandon J. Stringham
Aashish Dhungana	Gavin B. McGuire	Datenzing O. Tamang
Tanner J. Evans	Jordan C. Meese	Matthew C. Timm
Ryan N. Goodner	Amadaya A Michael	Sean V. Timm
Simant Guragai	Mark Perea	Douglas Ubeda-Harvey
Brandon D. Harrington	Safal Poudel	Robert W. Van Der Leek
Suyog Raj Joshi	Bennett G. Poulin	

MASTER OF SCIENCE IN COMPUTER SCIENCE

Kazi Solaiman Ahmed*	Reuben A. Fresquez	Aimee Ciane Nyambo
Raghavendra Neelesh Angaluri*	Aayush Gupta	Manideep Potluru
Nicholas A. Barrett	Michael J. Handrock	Jerom Kankalil Ronny
Brendan J. Burke	Keira E. Haskins	Humayra Tasnim
Jose Abel Castellanos Joo*	Melody Horn	Venkata Siva Naga Sai Kiran Veera
Yao Chung Chang	Anupkumar Nagaraj Joshi	Jamie Z. Yang
Zakery T. Clarke*	Vasman Kaur	
Jered B Dominguez-Trujillo*	Jacob Marks	

DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

Jeremy Benson†

*Summer 2021 Graduate

†Graduating with Distinction

INTERDISCIPLINARY PROGRAMS

Biomedical Engineering

MASTER OF SCIENCE IN BIOMEDICAL ENGINEERING

Micaela P. Cordova

Ashley J. Howell*

Qing Sun

Kaitlin M. Eversole

Irais Ortiz-Caraveo*†

DOCTOR OF PHILOSOPHY IN BIOMEDICAL ENGINEERING

Benjamin T. Matheson

Nanoscience and Microsystems Engineering

MASTER OF SCIENCE

Murali Manohar Duggina*

Arjun Senthil

Kiera J. McNary

Madalyn E. Wilson-Fetrow*

DOCTOR OF PHILOSOPHY

Zachary R. Brounstein†

David J. Walwark†

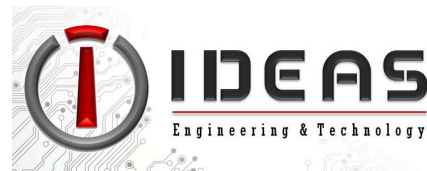
Raju P. Ghimire

Robert E. Malakhov

Jonathan C. Hebert

Thank you to our corporate partners

Here are some of the business and organizations that support the School of Engineering and our students:





Congratulations and Welcome!

Congratulations, graduates! Now that you have graduated, you are automatically a member of the UNM Alumni Association. There are no dues. Visit the UNM Alumni Association website for information and a complete listing of benefits at <http://www.unmalumni.com>.

We also welcome you to the School of Engineering alumni family. The UNM School of Engineering strives to keep you connected to the School in the most convenient way possible. As you move forward, please keep us informed regarding address changes, career moves, and significant events in your life. If you are interested in collaborating on an activity to engage fellow alums, let us know. Please contact us at engineeringalumni@unm.edu.