

THE UNIVERSITY OF NEW MEXICO SCHOOL OF ENGINEERING

FALL CONVOCATION

Saturday, December 12, 2020

A VIRTUAL EXPERIENCE

Message from the Dean

To the Fall 2020 University of New Mexico School of Engineering Graduates

Welcome to the Fall 2020 University of New Mexico School of Engineering Convocation.

I think it can safely be said that this year was not the year that we had planned for. All of us, but especially those finishing up their degrees this past calendar year, have endured unimaginable changes and challenges. We've been forced to do things differently — from attending classes or conducting research to gathering with classmates or even with family and friends. There is no doubt that the educational experience for this class has been a far different one than in years past.

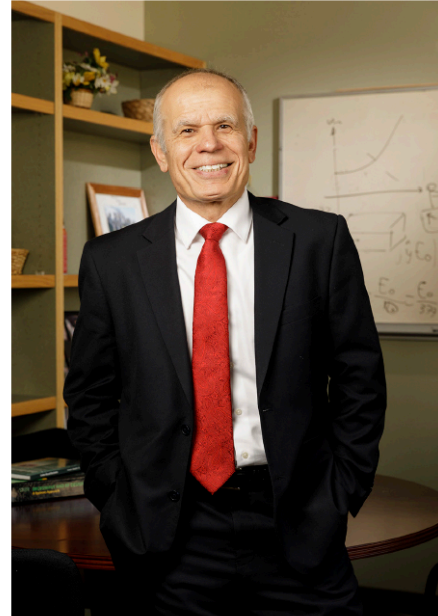
But that is all the more reason to salute the Class of 2020! As always, I am proud to lead you in celebrating the accomplishments of our graduating students, and that is especially true with the added obstacles each one of you had to endure this year. Earning an engineering or computer science degree is no small feat, and each of you did that successfully in a time that most of us are finding it challenging just to live our daily lives. That is something definitely worth celebrating!

Your perseverance this year has prepared you well for a career in tackling some of our greatest global challenges. I'm proud of all of our graduating students for their hard work and dedication. In these times more than ever, we need the kind of solutions that engineers and computer scientists can offer. You truly are our greatest hope for the future!

Thank you to all of the family, friends, teachers, professors, classmates, colleagues, coworkers, and advisors who helped make this day possible. Graduates, we welcome you to the distinguished company of the School of Engineering alumni and wish you every success in your new lives.



Christos Christodoulou
Jim and Ellen King Dean of Engineering and Computing



FALL CONVOCATION

UNIVERSITY OF NEW MEXICO SCHOOL OF ENGINEERING

SATURDAY, DECEMBER 12, 2020

A VIRTUAL EXPERIENCE

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, President
Kimberly Sanchez Rael, Vice President
Sandra K. Begay, Secretary-Treasurer
Robert M. Doughty III
Marron Lee
Robert L. Schwartz
Melissa C. Henry, Student Regent

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Convocation Program

MASTER OF CEREMONIES

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

KEYNOTE SPEAKER

Derek Smith, M.S., Ph.D., Computer Science

STUDENT SPEAKERS

Kelsie Herzer, B.S., Chemical and Biological Engineering

Rodrigo Llanes, M.S., Electrical and Computer Engineering

PRESENTATION OF DEGREE CANDIDATES

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

School Leadership

Christos Christodoulou, Dean, School of Engineering

Edl Schamiloglu, Associate Dean for Research and Innovation

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

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, Professor, Department of Electrical and Computer Engineering

Yu-Lin Shen, Chair, Department of Mechanical Engineering

Hyoung K. Lee, Chair, Department of Nuclear Engineering

Degrees Awarded

Department of Chemical and Biological Engineering
Department of Civil, Construction and Environmental Engineering
Department of Computer Science
Department of Electrical and Computer Engineering
Department of Mechanical Engineering
Department of Nuclear Engineering
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.

Keynote Speaker

Derek Smith

M.S, Ph.D., Computer Science

U.K. native Derek Smith probably never envisioned that he would one day find a niche with computer scientists, engineers, artists and even dancers in a city surrounded by the Sandia Mountains.

Now professor of infectious disease informatics in the Department of Zoology at the University of Cambridge, he grew up not far from Liverpool, England, which is of course most famous for producing The Beatles. He earned a bachelor's degree in computer science from the University of Bradford in the U.K., then after graduation, set off for a job in the far-away place of Dallas, Texas, to take a position at Texas Instruments.



After working at Texas Instruments for a decade, he made a decision that working on circuit design was not something he wanted to continue for the rest of his career. He had been exploring other avenues, including attending a neural network conference where a UNM computer science professor Stephanie Forrest (now at Arizona State University) was in attendance. He met her, then later looked up some of her research and liked what he saw. Derek then made the life-altering decision to quit his stable job and become a grad student at UNM, working with Forrest. He would go on to earn a master's degree and Ph.D. from UNM in 1994 and 1997, respectively.

Although New Mexico was not his native area, Derek grew familiar with New Mexico while living in Dallas, often making a 12-hour drive to ski in Taos on the weekends. He didn't know much about New Mexico, except that it's "the place where the land

became beautiful."

His time at UNM was memorable, he said, because of the freedom and diversity of the department helped him learn and grow. "We were all working on unusual stuff, and our differences were appreciated and celebrated," Derek said. "I was able to bring computer science theory into immunology, basically studying how our immune memory works. It takes a broad mindset as a department to accept that kind of research."

He has made his mark in his field by studying vaccines, particularly the flu vaccine. He is director of the Center for Pathogen Evolution as well as a member of the Department of Virology at Erasmus Medical Centre in The Netherlands. He is a member of the WHO influenza vaccine strain selection committee, and is also involved in vaccine strain selection for other human and non-human pathogens for the United Nations Food and Agriculture Organization and the World Animal Health Organization.

He considers one of his most proud professional accomplishments as his groups contribution to increasing the efficacy of the flu vaccine by about 20% in this year's batch. "It is saving people's lives," he said.

He also is proud of what his students and postdocs contribute and achieve, and feels grateful to collaborate with great scientists and also be friends with them. "It's really important to me to love what I'm and doing and like the people I'm doing it with," he said.

He is the recipient of the U.S. National Institutes of Health Director's Pioneer Award and UNM's Zimmerman Award. He said that what he learned at UNM has stayed with him and is applied into his current work.

"What we do today is a direct descendent of what I worked on at UNM."

Student Speakers

Kelsie Herzer

B.S., Chemical and Biological Engineering

Although her father is a computer scientist at Sandia National Laboratories, Kelsie Herzer is going a different route with her interest in technical subjects: she's focusing on how to make the world a more safe and sustainable place.



The Albuquerque native has become involved in nuclear remediation as well as sustainability studies, meeting a lot of students and forming a group called the Global Development Collective. However, her interests are diverse, having also worked in the lab of Matthew Lakin in computer science and conducting research on gene editing.

Her favorite memories of her time at UNM was of working in groups, both in leisure and in academics. She was a member of the National Society of Black Engineers and loves the group of students from various disciplines she met in her sustainability studies classes.

"I really relied on group work to study and formulate a lot of my ideas," she said. "I especially enjoyed the senior design projects."

Last year, one of those projects that got accepted into the prestigious National Renewable Energy Laboratory Marine Energy Competition. The UNM student group was one of only about a dozen teams around the world to get accepted and would have included \$15,000 in funding for supplies and travel to the competition to present their project on. However, due to the pandemic, the competition was canceled.

"I have a million hobbies," she said, which including roller skating, baking and gardening (she'd like to grow mushrooms).

Her advice for students is to not go it alone. "Reach out more. Ask for the numbers of classmates, ask if they want to get together to study. Develop friendships early on. I wish I would have done that earlier."

Kelsie's future plans include earning a Ph.D. (she's looking at UNM as well as some other schools) and eventually pursuing a career in academia, hopefully in her native New Mexico, with a focus on micro-remediation and sustainability.

Rodrigo Llanes

M.S., Electrical and Computer Engineering

It was in high school at Early College Academy that Albuquerque native Rodrigo Llanes first became interested in engineering. After taking some engineering courses there, he “fell in love with robotics.”



However, that love diminished when he finally did become an engineering student at UNM (earning his bachelor’s degree in electrical and computer engineering in 2018). “In college, I hated it [robotics].”

But clearly, he still maintained a love for engineering. “I’ve always liked building stuff and using math to do cool things.” That passion for electrical engineering was fostered by Professor Jane Lehr, whom Rodrigo met early on as an undergrad. Working with her, he became interested in applied electromagnetics and eventually earning a master’s degree in the area.

Rodrigo said that although the last year of school was challenging due to the pandemic (“It was frustrating, because I was supposed to graduate in May, then it got delayed over the summer”), he has fond memories of his years at UNM, especially his time with classmates in the lab.

In his spare time, he enjoys photography and mentoring at his church.

His advice to students is to stay connected. “Even though things will be challenging, it will be worth it. Find friends to go through it with. If you isolate yourself, you’re not going to make it.”

He has worked at Sandia National Laboratories since his junior year, and that experience has translated into a full-time position in RF.

Chemical and Biological Engineering

BACHELOR OF SCIENCE

Mutasim S. Al Rashdi*

Anil Basnet

Dylan Z. Mitchell

Saad M. Alsaadi

Kelsie R. Herzer

Milan Rede*

Dale Antonio

Christon J. Manuelito

Aspen K. Shafer*

MASTER OF SCIENCE IN ENGINEERING

Zane E Armijo*

Jacob D. Flack

Geoffrey R. Courtin

Rebecca P. Schmitt†



Geoff Courtin (center) supervises the CBE 418 lab in fall 2020. Here, students Colman Sandler (right) and Alycia Galindo were part of the class that had the assignment to design and carry out a distillation experiment to produce hand sanitizer. At the end of the experiment, students had to submit a proposal to a philanthropic organization or foundation to request funding to support the production of hand sanitizer and produce a pitch video.

*Summer 2020 Graduate

†Graduating with Distinction

Civil, Construction and Environmental Engineering

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

| | | |
|-------------------|----------------------|------------------|
| Celina C. Adame | Gabrielle Lucero | Steve N. Sharifi |
| John Adams | McKinley C. Millsaps | Luke A. Soens |
| Saud A. Alajmi* | Travis J. Moe | Lynette Torrez |
| John P. Coose | Dante G. Padilla | Abinash Upreti |
| Victoria Coronado | Kevin J. Parish | Tamara L. Walker |
| Natalie M. Gayoso | Jenae H. Robertson | Odey H. Yousef |

BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT

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| Alexandra L. Brown | Jacob Turcotte | Bethany M. Wells |
| George U. Palomino | Edgar O. Vargas-Hinojos | |
| Josiah J. Tipton | Jared D. Vigil | |

MASTER OF ENGINEERING

| | | |
|----------------|----------------------|---------------------|
| Jason L. Aldaz | Charlotte W. Harrell | Joaquin A. Martinez |
| Adam R. Baros | Christopher L. King | Eric S. Williams |

MASTER OF SCIENCE IN CIVIL ENGINEERING

| | | |
|-----------------------------|---------------------------|----------------------------|
| Marlon Frank Agüero Injante | Jose P. Hernandez | Aljaz Praznik* |
| Lauren M. Gomez | Claudia Jimenez Arellano | Eric Robbins |
| Risa E. Gutierrez | Aashish Sanjay Khandelwal | Cassy Scarlott-McClintock* |
| Tyler L. Hagengruber | Justin R. Nichols* | |

MASTER OF CONSTRUCTION MANAGEMENT

| | | |
|-------------------|----------------------|-------------------|
| Everett Bighthumb | Kristen C. James | Frank J. Tanzillo |
| Rajeeb Hazra* | Christopher C. Mann* | |

DOCTOR OF PHILOSOPHY IN ENGINEERING

| | | |
|------------------|------------------|-----------------------------|
| Mohiuddin Ahmad* | Cherie L. Devore | Carmen Adela Velasco Rivera |
|------------------|------------------|-----------------------------|

*Summer 2020 Graduate

†Graduating with Distinction

Computer Science

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Florentino Barrientos

Zakery T. Clarke

Tyson G. Craner

Zachary L. Fleharty

Isaac D. Heflin

Elijah C. Johnson

Jarett C. Jones

Kenneth J. Lucero

Daniel W. Miller*

Venkat K. Muthyapu

Alexander S. Pagan

Arlin F. Pedregon Quezada

Farhang Rouhi*

Christopher A. Salinas

Nathan Schaefer

Sandesh Timilsina

MASTER OF SCIENCE IN COMPUTER SCIENCE

Ryan C. Adams

Thomas E. Adams

Lalita Aditya Vishnu Sai Anche*

Ian A. Baldwin

Nitin Bhandari

Dipendra Humagain

Soheila Jafari Khouzani

Shashikant S. Jagadhane*

Trevor La Pay*

Ashley N. Mayle

Tony H. Nguyen

Sairamya Madhavi Devi Praturi

Kellin Rumsey*

Harshita Sahani

Hui Sun

Vanessa Surjadidjaja

Sharat Chandra Reddy Tangella*

Sahba H. Tashakkori

William F. Vining

Wenjun Yang

Rohit Yerramsetty*

DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

Diksha Gupta

William W. Schonbein



Darko Stefanovic, chair of the Department of Computer Science, stands with the inaugural Van Dyke Software scholarship recipients Preston Hamilton, Brandon Stringham and Alan Shen in March 2020.

*Summer 2020 Graduate

†Graduating with Distinction

Electrical and Computer Engineering

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

| | | |
|--------------------------|------------------------|----------------------|
| Samipya Bhattarai | Charles W. Helmich | Marshall G. Hundemer |
| Hani Nikith Devarapalli* | Delbert Toshio Herrera | Jaesic C. Olguin |
| Amber E. Disher | Brandon R. Hill | Edwin Rodriguez |

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

| | | |
|---------------------|---------------------|---------------------|
| Fehan A. Almutairat | Jonathan Z. Daniels | Siraj H. Sagga* |
| Rena L. Berdine | David Kirby | Landon A. Schmucker |
| Judith A. Brewer | Zonglin Li* | Caleb G. Shinault |
| Rajani Budha | Kuo Liao | Jessica M. Smyth* |
| Ryan T. Colvin | Joshua A. McKenney | |

MASTER OF SCIENCE IN COMPUTER ENGINEERING

| | | |
|----------------------------|-------------------------------|--------------------|
| Panagiotis Anagnostopoulos | Alexis Stalin Alulema Flores | Akash A. Patel* |
| Adhitya B. Bhandarkar | Georgios Fragkos† | Nathan R. Patrizi† |
| Chaitanya Boggavarapu* | Sean S. Lebien† | Kelly J. Rael |
| Chongyu Chen | Naga Sai Prithvi Raj Mamidala | Alexis M. Rubin |
| David I. Crowley | Kashif H. Nadeem* | Yijie Yu |
| Ryan L. Fleming | Rachel M. Palmer | |

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

| | | |
|----------------------------|----------------------|---------------------------|
| Raul E. Gutierrez | Benjamin F. Matins | Benjamin J. Reimer**† |
| Dingming Hu | Yuliya A. Matlashova | Daniel Ruiz Garcia |
| Rahul Jaiswal* | Andrew T. Miano | David E. Sanabria Diaz**† |
| Rodrigo E. Llanes† | Sajay K. Paruthiyil | Oscar Urias |
| Talal Ahmed Malik* | Troy C. Powell* | Ashley D. White* |
| Braulio Martinez-Hernandez | Neelofar Qasmi | |

*Summer 2020 Graduate

†Graduating with Distinction

Electrical and Computer Engineering

DOCTOR OF PHILOSOPHY IN ENGINEERING

COMPUTER ENGINEERING

Gangadharan Esakki*

Derek S. Heeger†

ELECTRICAL ENGINEERING

Mohamed Attia Abdelrahman Aref†

Andrea C. Schmidt†

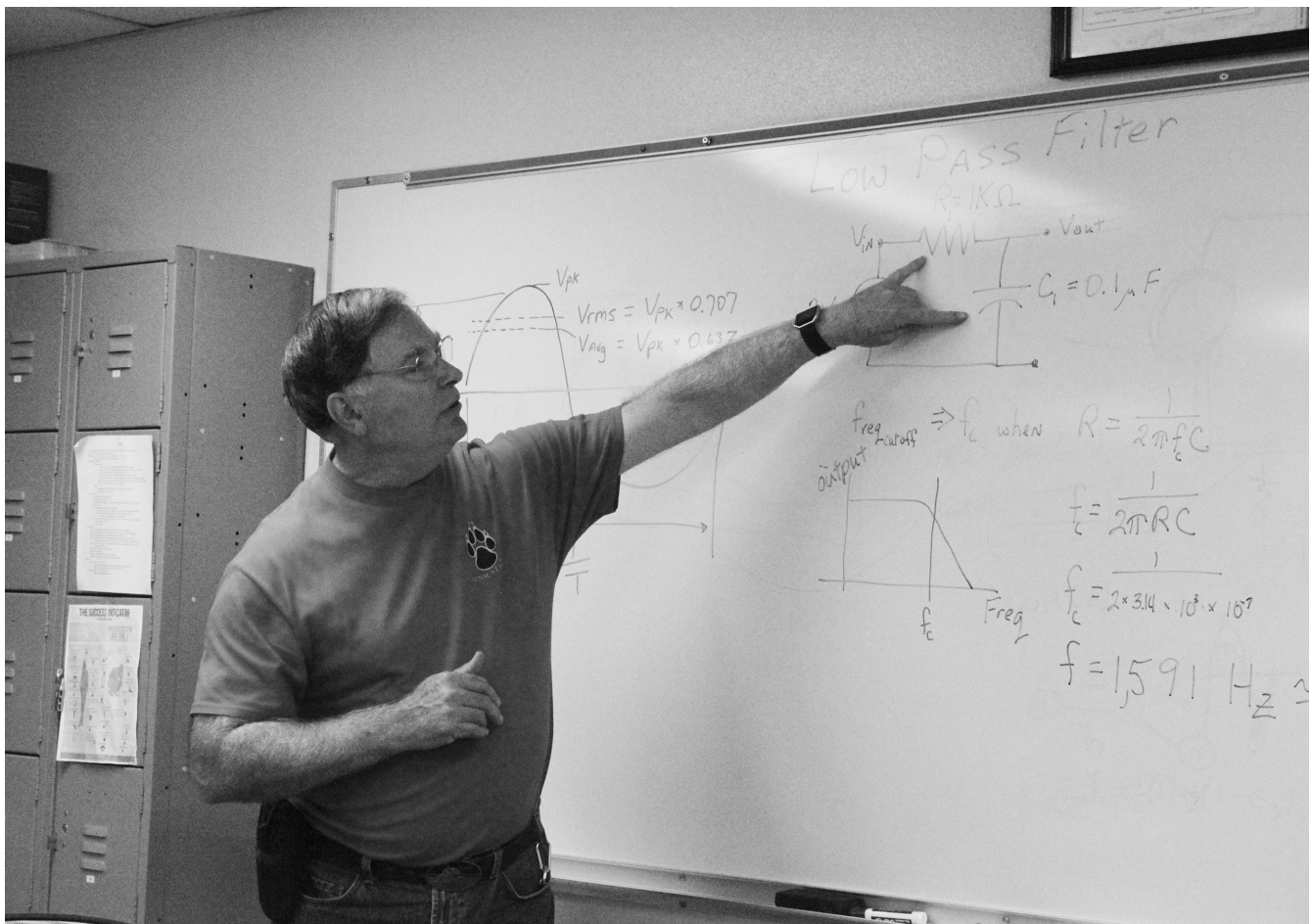
Shu Wang*

Manish Bhattarai†

Nishay H. Sule

Eric E. Hamke

Luis A. Valbuena Reyes



David Modisette teaches students at Open House the fundamentals of electrical engineering.

*Summer 2020 Graduate

†Graduating with Distinction

Mechanical Engineering

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

| | | |
|----------------------------------|--------------------|-------------------------|
| Abed M. Bataineh | Anish Gautam | Jens H. Pursche |
| Duy N. Bui | Toby A. Gomez | Jennifer Restrepo |
| Mateus V. Cabanlong | Joaquin R. Herrera | Daniel T. Seligman |
| Daniel Casas | Matthew W. Holly | William C. Stanopiewicz |
| Will M. Davidson | Lucais T. Martin | Bryan Steiner |
| Neel S. Debgupta | Savanah R. Medina | Joseph A. Tira |
| Ishwor Dhungana | Aaron N. Otto | Gabriel L. Trejo |
| Alexandra Fosness | Abhaya Paudel | Jacob M. Valdez |
| Karl B. Foster | Elijah J. Penny | |
| Orlando Andres Garayburu Caruso* | Ryan A. Pope | |

MASTER OF SCIENCE IN MECHANICAL ENGINEERING

| | | |
|-----------------------|--------------------|----------------------|
| Ryan D. Beauchemin | Chase Kayser | Timothy L. Santos |
| Spencer Bickett | Marshall Klee | Nathan R. Schroeder |
| Christopher A. Buksa* | Joshua L. Nowlin | Sonya Y. Schultz |
| Breanna M. Cunningham | Casey R. Ottesen* | Allie M. Snyder |
| Daniel Freelong | Matt N. Robinson | Erika N. Yegerlehner |
| Andrew J. Haug | Carter S. Sanford* | |

DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING

| | |
|----------------|-----------------------|
| Kevin W. Irick | Anthony R. Menicucci* |
|----------------|-----------------------|

*Summer 2020 Graduate

†Graduating with Distinction

Nuclear Engineering

BACHELOR OF SCIENCE IN NUCLEAR ENGINEERING

Lauren M. Crabtree*

Flora L. Valdez-Lopez

MASTER OF SCIENCE IN NUCLEAR ENGINEERING

James W. Evans*

Andrew S. Hahn

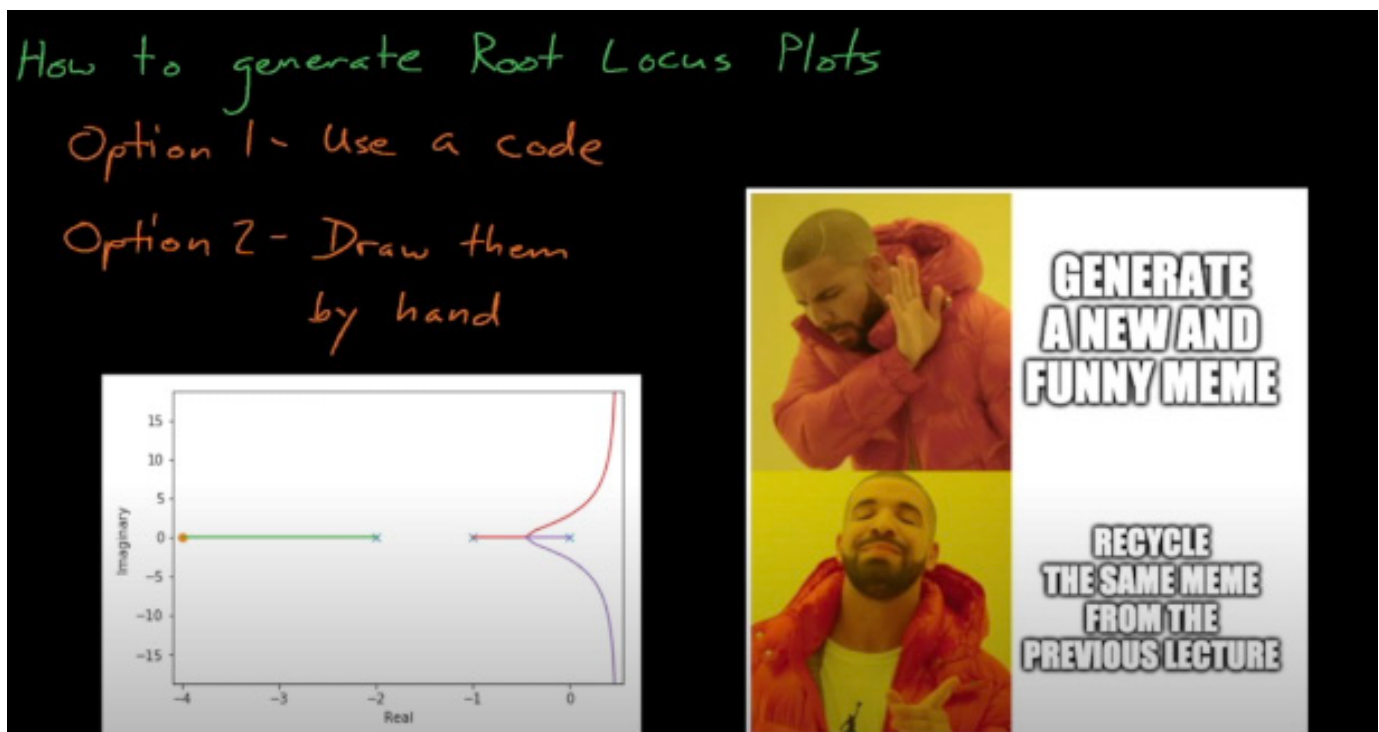
Aaron A. Overacker

Shuprio Ghosh

Joseph King

DOCTOR OF PHILOSOPHY IN NUCLEAR ENGINEERING

Daniel T. Wakeford



The COVID-19 pandemic has forced faculty to get creative in how they present their course information virtually to students. One professor, Chris Perfetti in nuclear engineering, has made all of his NE560: Nuclear Reactor Kinetics and Dynamics lectures available to public on YouTube. To view his lectures, search for his channel, Chris Perfetti, on YouTube.

*Summer 2020 Graduate

†Graduating with Distinction

INTERDISCIPLINARY PROGRAMS

Biomedical Engineering

MASTER OF SCIENCE IN BIOMEDICAL ENGINEERING

Leyla E. Akhadov*

Daniella Martinez

Celine N. West

Jason T. Belvin

Dominic J. Medina*

Qing Sun*

Praneeth R. Gudoor*

Irais Ortiz-Caraveo

Kara L. Komula

Christian A. Pattyn

DOCTOR OF PHILOSOPHY IN BIOMEDICAL ENGINEERING

Rohan P. Choraghe

Florencia A Monge**†

Carmen M. Villalobos

Nanoscience and Microsystems Engineering

MASTER OF SCIENCE

Ramon Asiain Martin*

Robert E. Malakhov

Yang Yang

Fahimeh Maghsoodi*

Neal Wostbrock

DOCTOR OF PHILOSOPHY

Godwin Amo-Kwao

Lungyao Meng**†

Paul J. Gieri

Andre' J. Spears

Optical Science and Engineering

DOCTOR OF PHILOSOPHY

Hanieh Afkhamiardakan*

Ke Huang*

Behshad Roshanzadeh*

Ning Hsu

Junwei Meng*

Esmail Mobini Souchelmaei**†

*Summer 2020 Graduate

†Graduating with Distinction

Thank you to our corporate partners

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



Engineered Equipment Sales & Testing





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.

Information for graduates



FALL 2020
CONVOCATION
A CELEBRATION OF YOUR ACCOMPLISHMENTS

SATURDAY, DECEMBER 12
LIVESTREAMED ON FACEBOOK AND YOUTUBE

10 a.m.
UNDERGRADUATE CEREMONY

2 p.m.
GRADUATE CEREMONY

  YouTube
@UNMEngineering

EVENT PROGRAM AND MORE INFORMATION
goto.unm.edu/fall2020convocation



#UNMGrad
Keep up with all of UNM's graduation activities

UNM SCHOOL OF ENGINEERING

More information online

For complete information about our 2020 Fall Convocation, please visit goto.unm.edu/fall2020convocation

Follow us on Facebook and YouTube to view the fall 2020 undergraduate and graduate ceremonies.

Diplomas

The Office of the University Registrar will mail diplomas (unless the student has specified that it be held for pickup) after grades have been received and recorded, which is usually in mid-February for fall graduates. Diploma-related questions should be directed to the UNM Office of the Registrar at 505-277-8900 or by email to degrees@unm.edu.

