Dear Class of 2021,

Today is the day you’ve worked so hard toward — you are graduating! I know I speak for the entire University of Washington Department of Electrical & Computer Engineering when I say I am proud of you and all that you have accomplished.

Indeed, I commend you for facing the challenges of the last year head on and for finishing your degree despite the immense difficulties the pandemic has brought. I believe our university, our community, the nation and the world will benefit greatly from your grit and determination. Nice job!

Now, as you take the next step in your career, whether it’s into industry, academia or some other adventure, remember what you’ve learned both in and out of the classroom. Always pursue your work with the same passion and innovative mindset you applied as a student. Keep learning, keep asking questions, and keep feeding your curiosity. Know that you can accomplish great things by taking small steps and by relying on and supporting your community, your friends and your family.

Also know that graduating means you now join an elite membership — UW ECE alums. Many of our alumni have dedicated their careers to developing technologies that have had incredible positive social impact, working for or alongside distinguished engineers such as Henrique (Rico) Malvar, our guest speaker today. I encourage you to listen carefully to what people like Rico have to say and use their experiences to guide and inspire you.

Finally, as you go on to build the future, I hope that you return to the UW to join us at one of our upcoming alumni functions, whether it is virtual or in-person, and that you will keep us updated on your career development. Our door will always be open for you.

Once again, congratulations on a job well done!

Eric Klavins
Professor and Chair,
UW ECE
2021

Schedule:

01 Opening Remarks
Eric Klavins
Professor and Chair, UW ECE

02 Guest Speaker
Henrique (Rico) Malvar
Distinguished Engineer, Microsoft ResearchEnable

03 Warm Wishes
Faculty and Staff
UW Electrical & Computer Engineering

04 Virtual Procession
Ph.D. EE Graduates
MSEE Graduates
BSEE Graduates
UW ECE is proud to announce Henrique (Rico) Malvar, Distinguished Engineer at Microsoft, as our guest speaker for the 2021 UW ECE graduation ceremony.

Malvar is a research and industry leader who is known for his work in signal processing and data compression. He is also a strong advocate for expanding diversity in engineering and developing accessible technology. Malvar currently leads the Microsoft Research Enable group, which aims to empower people living with disabilities. His past roles include being Chief Scientist for Microsoft Research and Managing Director of Microsoft Research Redmond.

Malvar joined Microsoft Research in 1997 and founded the company’s signal processing group, which developed new technologies such as media compression formats used in Windows, Xbox and Office, as well as audio technologies used in Windows, Xbox, Kinect and HoloLens. He also made key contributions to developing compressed file formats used by most web video services today. In addition to these notable professional accomplishments, he has published over 170 technical articles and has been issued over 120 patents.

Before joining Microsoft, Malvar was Vice President of Research and Advanced Technology at PictureTel (later acquired by Poly). Prior to that, he headed the Digital Signal Processing research group at Universidade de Brasilia, Brazil. He received his Ph.D. in electrical engineering and computer science from the Research Laboratory of Electronics at MIT, a M.Sc. in electrical engineering from the Universidade Federal do Rio de Janeiro and a B.S. in electrical engineering from the Universidade de Brasilia.

“We chose Rico as speaker because he embodies excellence and dedication to the profession of engineering,” Klavins said. “He also exemplifies the kind of impact we hope our students will make on the world, engineering with social good in mind and helping to make technology accessible for all.”

Malvar has been a tremendous supporter of UW ECE for many years, serving as a key connection between Microsoft and the Department, and generously giving his time, talent and expertise. He has been a UW ECE affiliate professor since 1999 and served as chair of the UW ECE Advisory Board from 2012–2019. He also served on the UW College of Engineering’s Dean’s Visiting Committee from 2016–2019. In 2018, Malvar played a leading role in helping UW ECE to update its identity and change its name to better reflect the breadth of the Department. He continues to remain a pillar of support for UW ECE and is currently engaged with advising the Department on reputation-building initiatives.

Malvar is widely recognized for his leadership roles in an array of professional and academic associations. In addition to his involvement with UW ECE, he is a member of the U.S. National Academy of Engineering, the Washington State Academy of Sciences, the Brazilian National Academy of Engineering and the Brazilian Academy of Sciences. He is an IEEE Fellow and has received many awards, including a Technical Achievement Award from the IEEE Signal Processing Society and the 20th Century Landmark Award from the IEEE Seattle Section in 2014.

Malvar has a large number of achievements to his name and a wealth of experience to share. We look forward to hearing him speak at UW ECE Graduation about his long and illustrious career and the importance he places on giving back to others.
Ph.D. Graduates

Eldridge E Alcantara
“Direction-of-Arrival Estimation Using Signal Processing on Graphs”
Advised by: Les Atlas & Shima Abadi

Jingjing Bu
“Geometry of Feedback Control and Learning”
Advised by: Maryam Fazel & Mehran Mesbahi

Yize Chen
“Learning to Operate a Sustainable Power System”
Advised by: Baosen Zhang

Yueyang Chen
“Development of active silicon nitride nanophotonic platform with emergent materials”
Advised by: Arka Majumdar

Kun-Da Chu
“Area and Power Reduction Techniques for Millimeter Wave Phased-Array Transceiver Front-ends”
Advised by: Chris Rudell

Vikram Iyer
“Creating the Internet of Biological and Bio-Inspired Things”
Advised by: Shyamanath Gollakota

Yihan Jiang
“Deep Learning for Channel Coding”
Advised by: Sreeram Kannan

Chandrashekhar Lavania
“Towards Unsupervised Learning of Submodular Functions for Summarization”
Advised by: Jeff Bilmes
Victoria Zayats
“Leveraging Naturally Occurring Structure in Language Processing”
Advised by: Mari Ostendorf

Sachin Mehta
“Efficient Deep Learning for Visual and Textual Data”
Advised by: Hannaneh Hajishirzi & Linda Shapiro

Dianqi Li
“Deep Generative Models for Natural Language Generation”
Advised by: Ming-Ting Sun & Xiaodong He

Shan Lin
“Vision-based Surgical Instrument Segmentation and Endoscopic Sinus Surgery Skill Assessment”
Advised by: Blake Hannaford

Qiyu Liu
“Integrated Acousto-optic Devices based on Brillouin Optomechanics”
Advised by: Mo Li

Yao Long
“Voltage Regulation for Distribution Networks with Smart Photovoltaic Inverters”
Advised by: Daniel Kirschen

Sachin Mehta
“Efficient Deep Learning for Visual and Textual Data”
Advised by: Hannaneh Hajishirzi & Linda Shapiro

Andrew Pace
“Stepping Towards Control of Systems Undergoing Impact for Legged Locomotion”
Advised by: Samuel Burden

James D Rosenthal
Advised by: Matt Reynolds

Chenxin Su
“Time-domain analysis of multiple scattering effects on the radar cross section (RCS) of objects in a random medium”
Advised by: Yasuo Kuga

Trang Thi Minh Tran
“Neural Models for Integrating Prosody in Spoken Language Understanding”
Advised by: Mari Ostendorf

Victoria Zayats
“Leveraging Naturally Occurring Structure in Language Processing”
Advised by: Mari Ostendorf

Chenxin Su
“Time-domain analysis of multiple scattering effects on the radar cross section (RCS) of objects in a random medium”
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Trang Thi Minh Tran
“Neural Models for Integrating Prosody in Spoken Language Understanding”
Advised by: Mari Ostendorf

Victoria Zayats
“Leveraging Naturally Occurring Structure in Language Processing”
Advised by: Mari Ostendorf
MSEE Graduates

With Theses:

Donavan Martin Erickson
“Development of a High-Speed Hit Decoder for the RD53B Chip”
Advised by: Scott Hauck

Cuinn Rios Fey
“Histogram Matching to Reduce Acoustic Mismatch in Automatic Speech Recognition”
Advised by: Les Atlas

Maxim Amon Karrenbach
“Gaze2Grasp: Vision-based system for pre-grasp prosthesis control”
Advised by: Eric Rombokas

Sripathi Muralitharan
“TinyParrot: An Integration Optimized Linux Capable Host Multicore”
Advised by: Michael Taylor

Shashank Vijaya Ranga
“ParrotPiton and ZynqParrot: FPGA Enablements for the BlackParrot RISC-V Processor”
Advised by: Michael Taylor

Kelvin Lin
“Convolutional Layer Implementations in High-Level Synthesis for FPGAs”
Advised by: Scott Hauck

Trisha Ray
“Residential Rooftop Solar Equity in Washington State.”
Advised by: Daniel Kirschen

Ali Saffari
“WideScatter: Toward Wide Area Battery-Free Wireless Sensor Networks”
Advised by: Joshua Smith

Felix Schwock
“Statistical Analysis of Wind and Rain-generated Ocean Ambient Noise in the Northeast Pacific Continental Margin”
Advised by: Shima Abadi

Jeffrey Thomas
“Fringing Electric Field Sensors for the Detection of Incipient Thermal Damage in Composite Materials”
Advised by: Alex Mamishev

Without Theses:

Justin Agus
Eldridge E Alcantara
Faisal Fahad A Alsallum
Doruk Arisoy
Hannah Arntson
Christian Ayele
Agustin Banda
Chenyang Bao
Timothy P Bayliss
Mukund Bharadwaj
Sabrina Bhattacharai
Ermias Zegeye Biru
Josef Borrayo
Tyler Alexander Bowen
Amar Brar
Joseph Bruckner
Anthony Calvo
Gorkem Caylak
Prahas Chandran
Karan Anil Chauhan
Yujie Chen
Yetao Chen
Yu-Chia Chen
Zachary Y Cheung
Rey Ching
Baemin Chung
Karina Cisneros
Kenneth Collins
BSEE Graduates

Jinseong Ahn
Christopher Alexander
Rafael Antonio Laya Alfonzo
Chase Almond
Miranda C Anderson
Samuel Lee Anthony
Brian David Arnold
Lawrence Aguirre Atienza
Touraj Azmoudeh Matanagh
Ishaan Bhimani
Cai Julijan Biesinger
Nicolas Boye
Richard Berreton
Megan N Bui
Leona Josephine Burk
Austin Chan
Christian Chavez

Hongliang Chen
Qihuang Chen
Yangyu Chen
Lauren Jolie Choquer
Michelle E Chuang
James William Clough
Benjamin Jordan Cooper
Jade Cutter
Negin Darabi
Tyler O Darby
Rouen R. de la O
Chase Austin Deltner
Warren Du
Amelia Kay Quinn Dumovic
Alwaleed Khaled El-Himri
Austin A Faux
Shahrzad Feghhi

Justin Adam Feng
Michael William Fiscus
Charlie Fisher
Shawn W Fisher
Neil Patrick Flodin
Bea Eloissa Golla Flores
Hans Theodore Gaensbauer
Kaijun Gao
Danielle Marie Garrod
Ephrem Getachew Gebre
Jacob Edward Gervais
Mryam Isak Girmay
Apurv Goel
Hanwen Guo
Devgansh Gupta
Diana Victoria Haass
Kyle Hammond
Samantha Ivy Heilman
Kelly Ho
Roee Horowitz
Jay Houppermans
Alex Chia-Fu Hsu
Huan-En Hsu
Jordan Justin Hsu
Hao-Wei Huang
Zixin Huang
Nicholas B Iaroslavtsev
Cindy L Imm
Siddharthsinh Dipaksinh Jadav
Yunzhang Jiang

Shengwen Jin
Erik Johnson
Trager Joswig-Jones
Woojin Jung
Yeehyun Jwa
Kushaun Kak
Tyler Andre Kann
Aditya Karan
Grace A Wanjiru Kariuki
Ashiqul I Kazi
John Swanman Keller
Bilal Khalil
Usman Mohammad Khan
Nolan Kim
Samuel Y Kim
Cedric Wei Xiong Kong
Youssef Lahrichi
Anh H Lam
Leo Jianpeng Lam
Christian Lancaster
Yuk Tong Lau
Molly Le
Kang S Li
Yuhang Li
Kevin Liang
Umair Liaqat
Jia-You Lin
Yang Liu
Zhuoyin Long
John Arthur Lounsbery
Congrats
Class of 2021
Graduates create the future!

STAY IN TOUCH!

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