

# ALUMNI AWARDS INDUCTION CEREMONY

April 29, 2023



Georgia Tech  
College of  
Engineering



# 2023 INDUCTEES

## DEAN'S IMPACT AWARD

Glucobit, Inc., Ziyi Gao and Vedant Pradeep

## COUNCIL *of* OUTSTANDING YOUNG ENGINEERING ALUMNI

Mario Ball  
Benjamin Bellows

Amit Chandrasekhar  
Kris Johnson Ferreira  
Amanda R. Loftin

Mihir G. Pathak  
Jacob Tzegaegbe

## ACADEMY *of* DISTINGUISHED ENGINEERING ALUMNI

Paul Jeffrey (PJ) Bain  
Rebecca J. C. Brown  
Michael W. Burnette

Theodore (Ted) Colbert, III  
James R. Hamilton  
Jacqueline Gilyard Jones  
Michelle D. Mason

Fernando A. Mujica  
C. Anne Patterson  
Kartik S. Sundareswaran

## ENGINEERING HALL *of* FAME

Thomas Barnhardt, III  
Gen. Philip M. Breedlove  
Melinda (Mel) Coker

Decie Burnett Autin Coleman  
Goodman B. (G.B.) Espy  
Tom Fanning

Deborah Kilpatrick  
Christopher B. Lofgren  
Ray T. Muggridge, III

## DEAN'S APPRECIATION AWARD

John A. White, Jr.

# the CEREMONY

**WELCOME** Raheem A. Beyah  
*Dean & Southern Company Chair*

**CO-HOST** Sandra (Sandy) Magnus, Ph.D.M.S.E. 1996  
*Principal, AstroPlanetview, LLC*  
*Professor of the Practice*

**STUDENT SPEAKER** Chloe Weed, Env.E.  
*Clark Scholar*

**INDUCTION** Dean's Impact Award  
Council of Outstanding Young Engineering Alumni  
Academy of Distinguished Engineering Alumni  
Engineering Hall of Fame  
Dean's Appreciation Award

**ACKNOWLEDGMENTS  
& CLOSING REMARKS** Raheem A. Beyah

# the MENU

## SALAD

### Caesar Salad

*Traditional Chopped Romaine, House-made Croutons, Parmesan Frico,  
Classic Creamy Dressing with Shaved Parmesan Cheese*

## PRE-SELECTED ENTRÉE

### Filet of Ribeye and Crab Cake

*Grilled Filet of Ribeye with a Seared House-made Crab Cake, Chive Beurre Blanc  
Green Bean Bundles with Carrot Ties and Fingerling Potatoes*

### Vegan Eggplant Lasagna

*Eggplant Lasagna, Mushroom Bolognese, Herbed Panko Breadcrumbs,  
Vegan Cream Cheese with Grilled Asparagus*

## DESSERT

### Bailey's Mousse Dome

*Bailey's Spiked Dark Chocolate Mousse on a Fudge Cake Base Enrobed in Chocolate  
Caramelized White Chocolate Anglaise, Dark Chocolate Pearls*

### NY Style Cheesecake

*NY Style Cheesecake on a Graham Crust  
Laden with Fresh Strawberries, Vanilla Whipped Cream, and Chocolate Pearls*

## DINNER WINES

### Cakebread Chardonnay

### Farmstead Cabernet Sauvignon

# from THE DEAN

Dear Honorees and Guests:

As a native Atlantan and a double jacket (master's and Ph.D. in ECE), I couldn't be happier and more honored to celebrate tonight's honorees. Three years into my role as dean of the College, the ideas and accomplishments of our engineering alumni continue to amaze and humble me.

This evening, we are again reminded of their tremendous contributions to society. Through their stories and triumphs, we celebrate the many ways this year's honorees have shaped the past and will help define our future.

Tonight, you'll hear about experiences that have taken them across the country and around the world. This group has done it all: They lead globally recognized companies and have started their own businesses. They've explored the heavens, served at the top ranks of our armed forces, advanced human health, and more. And this year, we're particularly honored to welcome back the person whose legacy includes tonight's event.

Our honorees are the epitome of Georgia Tech, and I'm humbled to stand among them as members of our alumni community. They are inspiring and remarkable. They serve as ambassadors for our students, who are preparing to follow in their lofty footsteps. And most of all, they are each a Helluva Engineer.

Congratulations to you all. Please enjoy tonight's event with friends, family, and the College of Engineering community.



**RAHEEM A. BEYAH**

Dean & Southern Company Chair  
College of Engineering  
Georgia Institute of Technology

# from THE PRESIDENT



**ÁNGEL CABRERA**

President  
Georgia Institute of Technology

Dear Distinguished Alumni and Guests:

Greetings and welcome to the Georgia Tech College of Engineering Alumni Awards, one of the College's most important celebrations. The College is foundational to the Institute's history and success. In fact, 60% of all Georgia Tech alumni are engineering graduates.

Dean John A. White, one of tonight's honorees, established this event in 1994. Ever since, the College has used this occasion to honor the many accomplishments of the Institute's most distinguished engineering alumni. I extend my warmest and most sincere congratulations to all of tonight's honorees (the inspiration to our younger alumni and our current students). You are a lasting symbol of Georgia Tech's enduring reputation for excellence and innovation and a living testament to our mission of developing leaders who advance technology and improve the human condition. Each of you has made a significant impact in your respective fields of expertise, and I am honored and tremendously proud to celebrate those accomplishments.

Thank you for all you have done and continue to do for your own communities and organizations. You are shining examples of everything that is special about being a Georgia Tech Yellow Jacket and the reason why the College continues to be recognized as one of the greatest in the world.

Enjoy tonight's ceremony and *Go Jackets!*

# CO-HOST

Sandy is the principal at AstroPlanetview, LLC, and a part-time professor of the practice at Georgia Tech in aerospace engineering, materials science and engineering, and international affairs. Prior to joining her alma mater, she was the chief engineer for the Department of Defense, serving as deputy director of engineering in the Office of the Secretary of Defense. She also served as the executive director of the American Institute of Aeronautics and Astronautics, the world's largest technical society dedicated to the global aerospace profession.

Selected to the NASA Astronaut Corps in 1996, Sandy flew in space on the Space Shuttle Atlantis in 2002 and on the final shuttle flight, STS-135, in 2011. In addition, she flew to the International Space Station on STS-126 in 2008, where she served as flight engineer and science officer on Expedition 18 for four-and-a-half months. She served at NASA headquarters in the Exploration Systems Mission Directorate and was deputy chief of the Astronaut Office.

Before joining NASA, Sandy worked for McDonnell Douglas Aircraft Company from 1986 to 1991 as a stealth engineer. She worked on internal research and development and on the Navy's A-12 Attack Aircraft program, studying the effectiveness of radar signature reduction techniques.



**SANDRA (SANDY) MAGNUS**

Ph.D.M.S.E. 1996

Principal, AstroPlanetview, LLC

Professor of the Practice

# student **SPEAKER**

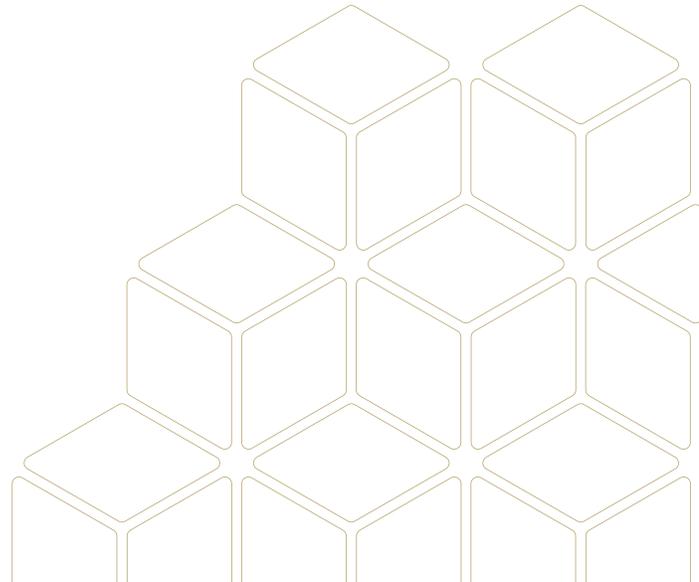


**CHLOE WEED**

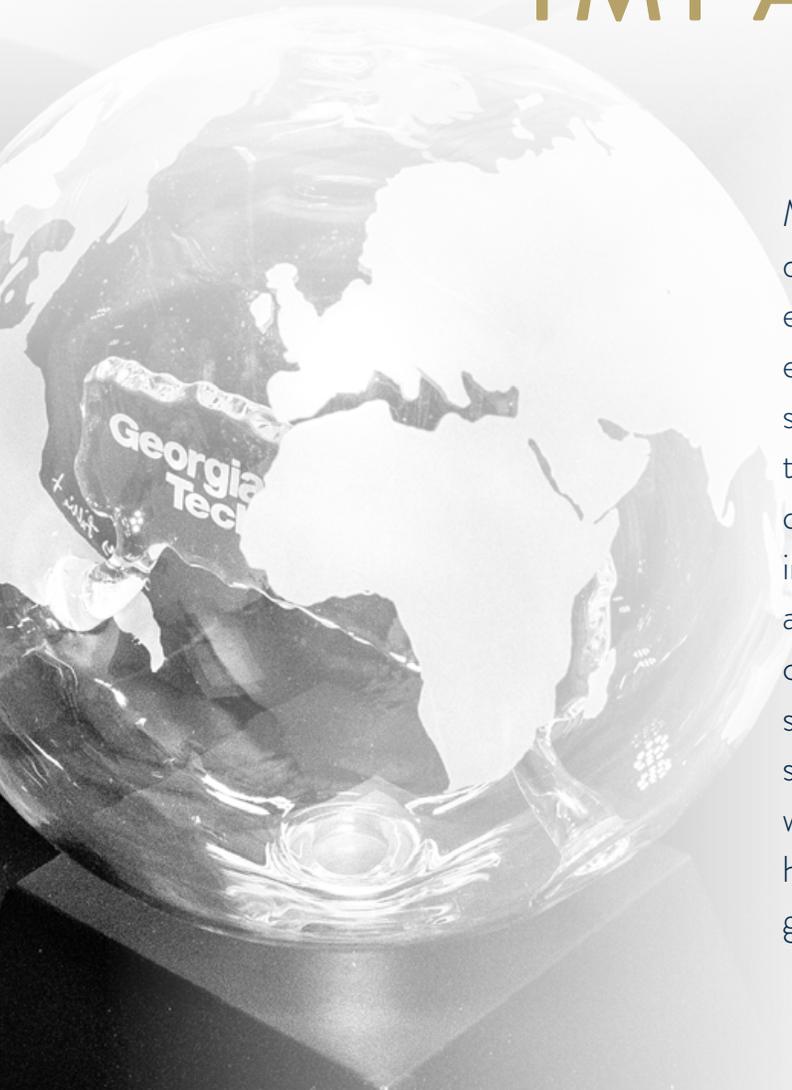
Environmental Engineering

Chloe Weed is a first-year Clark Scholar from Severn, Maryland, majoring in environmental engineering and minoring in French. Chloe aims to specialize in air pollution and carbon capture to reduce greenhouse gas emissions and hopes to be a force for good in the fight against climate change.

Chloe plans to use her Georgia Tech education to work abroad on sustainable development in France and other countries. Her goal is to innovate new infrastructure and policies that will increase the quality of the natural and human environments. On campus, she is involved with the Association of Environmental Engineers and Scientists, Organization for Social Activism, Re-volv Solar Ambassadors, GT Salsa, and the Women's Club Rugby Team. Chloe is a lead intern for a Maryland organization that promotes sustainable agriculture through education, research, and student-led service.



# Dean's IMPACT AWARD



Many College of Engineering alumni have devoted themselves to fostering a more equitable global community that also is ecologically, socio-culturally, and economically sustainable. The Dean's Impact Award recognizes the efforts of these alumni who are focused on developing globally relevant, locally sustainable innovations that meet societal challenges across the world. The College of Engineering is committed to a multicultural, multidisciplinary, sustainable, and international engagement by our students. This award recognizes those graduates who embrace engineering through this lens and have a vision to find solutions for the world's grand challenges.



**ZIYI GAO**  
**B.S.I.E. 2017**  
COO, Glucobit, Inc.



**VEDANT PRADEEP**  
**B.Ch.B.E. 2019,**  
**B.Cmp.E. 2019**  
CEO, Glucobit, Inc.

Vedant and Ziyi met on campus in 2015 in their introductory ChBE 2100 class. They became partners and co-founded what would become Glucobit in 2018 while participating in the Georgia Tech CREATE-X program. Their initial goal was helping people detect nocturnal hypoglycemia, but the duo pivoted in 2019 toward helping people reduce alcohol use.

Their app, Reframe, is a neuroscience-based platform that helps people reduce alcohol consumption and discover the best versions of themselves. Reframe has become the leading direct-to-consumer alcohol reduction and habit change platform. It has helped more than 2 million people across 80 countries reduce alcohol use and often is among the most downloaded health and fitness apps worldwide. They have raised more than \$27 million in venture capital funding from top investors such as Y Combinator, Goodwater Capital, Harvard University, Atlanta Ventures, HOF Capital, and CREATE-X. Vedant and Ziyi's work has been featured in *TechCrunch*, *Fortune*, *Forbes*, *Yahoo Life*, *Independent*, the *Atlanta Journal-Constitution*, and more.



# *Council of* **OUTSTANDING YOUNG ENGINEERING ALUMNI**

The Council of Outstanding Young Engineering Alumni Award recognizes alumni who have distinguished themselves through professional practice and service to the Institute, the engineering profession, or society at large. They are on the fast track and have made rapid advancement within their organizations. Already, they have been recognized for early achievements by others within their profession, field, or organization.

**MARIO BALL**

**BENJAMIN BELLOWS**

**AMIT CHANDRASEKHAR**

**KRIS JOHNSON FERREIRA**

**AMANDA R. LOFTIN**

**MIHIR G. PATHAK**

**JACOB TZEGAEGBE**



## **MARIO BALL**

**B.S.B.M.E. 2007**

U.S Director of Sales and  
Commercial Execution —  
Cardiac Diagnostics,  
Boston Scientific

Mario started his career as a biomedical engineer before working in sales at companies that included NASA’s Johnson Space Center, Medtronic, and Stryker Orthopedics. At Stryker, his sales career flourished: He achieved President’s Club for four consecutive years and eventually was Sales Leader of the Year. In 2018, Mario became the youngest area sales manager at Medtronic CRM & Diagnostics, leading a sales team that spanned Texas, Louisiana, Arkansas, and Oklahoma. In 2020, he moved to Boston Scientific as a sales leader for Interventional Cardiology and Structural Heart, leading his team to be the No. 2 sales group in the country.

Mario is extremely passionate about service and community outreach. At Boston Scientific, he helped launch a mentoring program within the Interventional Cardiology and Cardiac Rhythm franchises, with around 50 mentors and mentees joining the program in 2021. Mario has helped more than 50 mentees find job opportunities within the medical device industry.

He also started a nonprofit foundation and created the Bridge Scholarship, a program that awards a \$2,000 book stipend and an Apple MacBook to a minority, STEM-focused, college-bound student from his high school. The scholarship is now in its eighth year.

Mario has served on the advisory board of the Petit Institute for Bioengineering and Bioscience at Georgia Tech.



## **BENJAMIN BELLOWS**

**M.S.A.E. 2005,  
Ph.D.A.E. 2006**

Executive Director,  
Program Chief Engineer,  
Pratt & Whitney

At Pratt & Whitney, Ben is responsible for strategic and technical leadership in the development of new state-of-the-art propulsion systems. Since July 2022, he has led a high-performance team through diverse phases, ranging from design and validation to engineering, manufacturing, and development transition preparation and prototype development. Ben started his career at Pratt & Whitney in 2006, working on military exhaust system aerodynamic design before holding engineering roles of increasing leadership on both military and commercial engine programs.

Ben serves as the Raytheon Technologies Executive Sponsor for Georgia Tech, where he is responsible for engagement across Tech in research, recruiting, and on-campus engagement. He is also a member of the Aerospace Engineering School’s Advisory Council and executive champion for Pratt & Whitney’s Combustion Center of Excellence.

Prior to earning his master’s and Ph.D. from the AE School, Ben graduated from Vanderbilt University with his mechanical engineering degree.



**AMIT  
CHANDRASEKHAR**

**B.S.Ch.B.E. 2011,  
M.S.Ch.B.E. 2012**

Associate Director  
of Pharmaceutical  
Development,  
Cassava Sciences, Inc.

After graduating from Georgia Tech, Amit worked at Eli Lilly and Company for nearly nine years in a variety of engineering and operations roles within manufacturing. Initially, he supported Lilly's tablet and capsule manufacturing facility. It included the company's first Good Manufacturing Practices continuous drug product manufacturing line, which won ISPE awards in 2017 for Facility of the Future and Process Innovation. He later supported a Lilly insulin fermentation facility, including qualification and validation of a new \$90 million facility. During his time at Lilly, Amit led undergraduate engineering recruiting efforts at Georgia Tech and was responsible for hiring many Tech students for internships and full-time positions.

In 2020, Amit moved to Cassava Sciences, providing oversight and technical leadership for development and manufacturing of an Alzheimer's drug currently in phase 3 clinical trials.



**KRIS JOHNSON  
FERREIRA**

**B.S.I.E. 2007**

Assistant Professor,  
Harvard Business School

After working as a consultant for Alvarez & Marsal following graduation, Kris earned a Ph.D. in operations research from MIT in 2015. Since then, Kris has been on the faculty at Harvard Business School, teaching analytics in executive education programs and supply chain management to MBA students. In her research, Kris has partnered with numerous retailers to design machine learning and optimization algorithms that help them make better revenue management decisions, including pricing, product display, and assortment planning. Currently, she is seeking to understand how employees use algorithmic recommendations in their decision-making and how such use can be improved to realize the full potential of human-algorithm collaboration. Kris and her husband, Dan, live in Boston with their two young sons (and future Georgia Tech fans), Luca and Oscar.



**AMANDA R. LOFTIN**

**B.S.P.F.E. 2013**

Production Planner,  
Liberty Coca-Cola Beverages

After Georgia Tech, Amanda earned her master's degree in banking and financial services management from Boston University in 2016. She is the production planner for Liberty Coca-Cola Beverages, planning for the production lines that produce Coca-Cola products for the New York City, New Jersey, and Philadelphia sales territories. Prior to this role, she was the supply chain and technical manager for Central National Gottesman's Nonwovens Business Unit.

Amanda is a certified project management professional and applies those tools to all aspects of her professional and personal life. Last year, she and her husband pledged to fund an endowment through the Georgia Tech Foundation to help young women attend Georgia Tech and study materials engineering. At home, she has two amazing and energetic young children.



**MIHIR G. PATHAK**

**B.S.M.E. 2008,  
M.S.M.E. 2010,  
Ph.D.M.E. 2013**

Chief Operating Officer,  
Mayvenn

Mihir's research in cryogenic physics for space applications led him to join the inaugural class of the NASA Space Technology Research Fellows. He published more than a dozen peer-reviewed scientific manuscripts while serving as a research scientist at NASA across the Jet Propulsion Laboratory, Ames Research Center, and Goddard Space Flight Center. He later became the agency's legislative liaison on Capitol Hill, developing the NASA strategic plan and mission strategy while securing financial and political support.

Mihir was tapped to join the Obama Administration as a policy advisor for the White House National Economic Council, where he focused on crafting economic policy for entrepreneurship and small business. He then worked at McKinsey & Company and Stack Overflow, where he helped grow the company's platform to over 150 million monthly visitors and, ultimately, a \$1.8 billion acquisition. Mihir currently serves as the COO at Mayvenn, a venture-backed beauty tech company. He is married to Praachi Pathak (B.S.M.E. 2010). They are raising two daughters, Asmi and Savi.



**JACOB TZEGAEGBE**

**B.S.C.E. 2011, M.S.C.E. 2013**

Head of Strategy, Snap One

After Georgia Tech, Jacob was awarded a Marshall Scholarship and completed two additional master's degrees from University College London in Urban Economic Development and Mega Infrastructure Planning, Appraisal, and Delivery. His career has taken him across industries and sectors: He has spent time as a management consultant at McKinsey & Company, senior transportation policy advisor to the mayor of Atlanta, and director of expansion for Via, a late-stage transit tech startup.

As head of strategy at Snap One, Jacob brings smart technology solutions to homes and businesses globally. Outside of work, Jacob serves on several boards, including MARTA, Georgia Tech Facilities Inc., and Propel ATL. Jacob is an Atlanta native and lives in the West End with his wife Elyse (also a double Jacket) and their newborn daughter, ETTY.



TECH TECH

# *Academy of* **DISTINGUISHED ENGINEERING ALUMNI**

The Academy of Distinguished Engineering Alumni Award recognizes alumni who have provided distinguished contributions to the Institute, profession, field, or society at large. Candidates are highly placed executives and are actively involved in engineering, management, industry, academia, or government.

**PAUL JEFFREY (PJ) BAIN**

**REBECCA J. C. BROWN**

**MICHAEL W. BURNETTE**

**THEODORE (TED) COLBERT, III**

**JAMES R. HAMILTON**

**JACQUELINE GILYARD JONES**

**MICHELLE D. MASON**

**FERNANDO A. MUJICA**

**C. ANNE PATTERSON**

**KARTIK S. SUNDARESWARAN**



**PAUL JEFFREY (PJ) BAIN**

**B.S.I.E. 1991**

CEO, PrimeRevenue

Since joining PrimeRevenue in 2009, PJ has ushered the Atlanta-based company from visionary startup to its current position as a disrupter and global leader in delivering digital supply chain finance and working capital solutions. Under his leadership, PrimeRevenue has experienced 20% or more year-over-year revenue increases and significant market expansion. Today, the company's digital network supports \$300 billion in annual payment transactions for more than 400 buyers, 45,000 suppliers, and 100 funding partners in 90+ jurisdictions. PrimeRevenue is regularly named a Top Workplace by the *Atlanta Journal-Constitution* and was featured on the INC 5000 Fastest-Growing Companies in America list for nine consecutive years.

PJ is a lifelong entrepreneur and business leader who instills a performance-driven and values-based culture. He also is actively involved in charitable, civic, and community initiatives. He is vice chair of the Board of Trustees of Cristo Rey Jesuit High School Atlanta and serves on the boards of directors for Leadership Atlanta, the Metro Atlanta Chamber of Commerce, and the Business Executives for National Security.



**REBECCA J. C. BROWN**

**M.S.M.E. 2001,  
Ph.D.M.E. 2003**

Vice President of  
Global Regulatory Affairs,  
MiMedx Group, Inc.

MiMedx is a biopharmaceutical company developing, manufacturing, and marketing regenerative biologics utilizing human placental allografts for multiple sectors of health-care. As vice president, Rebecca is currently responsible for executing regulatory strategy and advancing regulatory approvals for healthcare products worldwide. During her career at MiMedx, she has been responsible for the company's product development, intellectual property, quality assurance, and regulatory affairs. She holds numerous U.S. and international patents.

Rebecca currently serves as vice chair of the Woodruff School's Advisory Board and is cofounder and chair of the new Women of Woodruff (WoW) organization. WoW is committed to ensuring women students and faculty have the tools they need to thrive at Tech through recruitment, retention, and rewards.

Rebecca and her husband, Jason Brown (M.S.M.E. 1998, Ph.D.Arch. 2010), also support Georgia Tech through their endowment funds. They have two children, Jack and Clara.



**MICHAEL W. BURNETTE**  
**B.E.E. 1998, M.S.M.O.T. 2006**  
Chief Service Officer,  
Leapfrog Services

After receiving his electrical engineering degree and a master's in the Scheller College of Business, Michael spent a decade working in IT management and computer forensics in the legal industry. He then became vice president of information technology for Peak Campus Management, where he pioneered residential technology solutions for student and military housing. Michael served as CTO for Intelliteach, a global legal managed service provider. During his tenure there, the company executed mergers and acquisitions to become the largest legal-specific business process outsourcer in the U.S. Today, Michael serves as chief service officer for Leapfrog, a multi-vertical technology business process outsourcer and is responsible for the delivery of extraordinary services to companies across the nation.

Michael currently serves on the ECE Advisory Board. He lives in Atlanta with his wife, Eniko, and a cat, BuBu. The family has made a Georgia Tech Founders Council gift to provide scholarships for international students.



**THEODORE (TED)  
COLBERT, III**  
**B.I.E. 1996**

President and CEO, Boeing  
Defense, Space & Security,  
The Boeing Company

Since joining Boeing in 2009, Ted has held several positions, including president and chief executive officer of Boeing Global Services, chief information officer, and senior vice president of Boeing's Information Technology & Data Analytics. He currently is president and CEO of Boeing Defense, Space & Security, which provides solutions for defense, space, intelligence, and security customers worldwide. Ted also is a member of Boeing's Executive Council.

Ted serves on the board of directors of the Thurgood Marshall College Fund, the Virginia Tech Innovation Campus Advisory Board, and New Leaders, where he serves as board chair. In 2022, The Black Engineer of the Year Awards named him Black Engineer of the Year, the organization's top honor. Ted was recently appointed as a member of the National Space Council Users' Advisory Committee.

Ted completed the Dual Degree Engineering Program at Georgia Tech and Morehouse College. He continues to stay involved with campus, including serving two terms on the Georgia Tech Advisory Board.



**JAMES R. HAMILTON**

**B.C.E. 1977**

Senior Vice President,  
Kimley-Horn

Jim has provided professional civil engineering services for more than four decades for clients in public and private development projects throughout the U.S.

Operating with his personal mission statement of helping clients achieve development success while keeping an eye on the vulnerable nature of the environment, Jim's career includes 30 years as founder, president, and CEO of Southern Civil Engineers in Alpharetta. His firm joined Kimley-Horn in 2013, helping to expand their Southeast footprint. His projects include the award-winning 504-acre Brasstown Valley Resort; the redevelopment of Colony Square in Midtown Atlanta; the nationally acclaimed Avalon mixed-use development in Alpharetta; AutoZone's World Headquarters; and 30 school campuses and mixed-use projects throughout the Southeast. The Georgia Engineering Alliance (GEA) named him Engineer of the Year in 2006 and 2012.

At Georgia Tech, Jim was the civil engineer for the Sustainable Education Building and the Transit Hub. He contributed to the redevelopment of CEE's Mason Building.

Jim has served as chairman of ACEC Georgia, chair of GEA, and is an emeritus member of the CEE External Advisory Board.

He and his wife, Jamie, have been married for 48 years. They have two children, Jordan and Jim (B.S.I.M. 2004), and five grandchildren.



**JACQUELINE  
GILYARD JONES**

**B.Cer.E. 1984**

Senior Consultant,  
Viridis Consulting LLC

Jacqueline started her engineering career at Corning Glass Works as a co-op student and was hired as an applications engineer after graduation. She later moved to California to join the aerospace industry. At Ford Aerospace, she supported the manufacture of missile systems. At Hughes Aircraft, she successfully managed process engineering and design engineering for radar systems. In 1998, Jacqueline joined Southern California Edison, an electric utility, and became one of the state's leading strategists in the integration of clean energy resources. In 2017, Jacqueline founded BioPower Enterprises, where she designed and led the development of systems to eliminate food waste onsite. The household-sized system is suitable for use by the average four-person household and reduces as many greenhouse gases as an electric car. Jacqueline is now a senior consultant at Viridis Consulting, a boutique firm serving as the critical link between policy and action in the transformation to a carbon-free economy.

Recognizing that higher education is a major driver of social equity, Jacqueline has endowed scholarships for Black students in materials science and engineering in honor of her parents, Robert L. and Velma M. Gilyard. She is currently pursuing a master's degree in entrepreneurship and innovation at California State University, San Bernardino.



**MICHELLE D. MASON**

**B.S.Ch.E. 1986**

Global Senior Market Developer,  
ExxonMobil

Michelle has been at ExxonMobil for the last six years and was previously a market developer in Catalyst and Licensing. Prior to Exxon, she served as global director of marketing for Avient Corporation, Kraton Chemical Corporation, and International Paper. Throughout her career, Michelle has built and elevated brands, identified new markets for growth, and driven new product innovation to support the needs of the market.

Michelle serves on the Georgia Tech Advisory Board and Regional Advisory Board for the Smithsonian Institution. Mentorship is her passion, and she encourages, counsels, and advises students on their engineering trajectory.

Michelle also earned a degree in chemistry from Spelman College and an MBA with a concentration in marketing from the University of Memphis.



**FERNANDO A. MUJICA**

**Ph.D.E.C.E. 1999**

Director of Engineering,  
Special Projects Group,  
Apple, Inc.

Fernando has been with Apple, Inc. since 2015. He also has been an adjunct professor in the Department of Electrical Engineering at Stanford University since 2014, teaching digital signal processing. From 2000 until 2015, Fernando was with Texas Instruments, Inc. He and his teams developed innovative signal processing solutions in a wide range of applications, including communications systems, pre-distortion of RF power amplifiers, analog to digital converter compensation, loudspeaker protection, signal processing very large-scale integration architectures, massively parallel multi-core programmable co-processors, and autonomous systems.

Fernando's research focuses on embedded implementations of signal processing systems. He has been a research collaborator in various projects at Georgia Tech and other universities for almost 20 years. He has authored or co-authored more than 30 peer-reviewed publications and has been granted more than 25 U.S. patents. In 2009, he was recognized by the Society of Hispanic Professional Engineers with the National STAR Professional Role Model Award.

Fernando served on the ECE External Advisory Board from 2013 until 2022. Fernando earned his undergraduate and master's degrees in electronics engineering from Universidad Simón Bolívar in Venezuela.



**C. ANNE PATTERSON**

**B.A.E. 1971, M.S.A.E. 1975**

CEO, Women's Telehealth

After becoming the eighth woman to graduate from Georgia Tech with an AE bachelor's degree, Anne worked at NASA's Goddard Space Flight Center and was one of two engineers responsible for the propulsion systems in the Small Astronomy Satellites (SAS) 2 and 3. SAS 2 gave the first detailed look at the gamma-ray sky and established the high-energy component of celestial radiation. SAS 3 identified neutron star binary systems and discovered the first quasar.

While earning her AE master's degree, Anne simultaneously fulfilled her pre-med requirements. That would lead to medical school at Emory University and, eventually, a faculty position. She became the first board-certified maternal fetal medicine specialist to establish a private practice in Atlanta.

In 2010, Anne wanted to care for women and children in small and underserved communities. She started a new and innovative company, Women's Telehealth, to provide state-of-the-art maternal fetal telemedicine. The venture provides high-resolution ultrasound studies that remotely examine the fetal heart and blood flow in the fetal brain in real time. The company has provided more than 100,000 patient visits and studies to women with high-risk pregnancies in urban, rural, and underserved communities.

Anne is the mother of a 2022 AE master's graduate.



**KARTIK S.  
SUNDARESWARAN**

**B.S.Cmp.E. 2003,**

**M.S.E.C.E. 2007,**

**Ph.D.Bio.E. 2008**

Divisional Vice President, Global  
Clinical and Regulatory Affairs,  
Abbott Heart Failure

Kartik's Georgia Tech doctoral thesis involved characterizing the hemodynamics of children with single ventricle physiology using phase-contrast, magnetic resonance imaging. His work led to numerous awards, including the American Heart Association Pre-Doctoral Fellowship in 2007.

After earning three Georgia Tech degrees, Kartik joined Abbott in the Heart Failure (HF) division as a clinical scientist to continue his research work. During his tenure in the HF division, Kartik was instrumental in advancing the clinical science of patients with end-stage heart failure. His research led to more than 30 scientific publications, including the highest-cited study among all scientific articles published in the *Journal of Thoracic and Cardiovascular Surgery* over a 10-year period.

In his current role, Kartik serves on the executive leadership team of the Abbott Heart Failure Division. He is responsible for generating scientific clinical evidence and obtaining global regulatory approvals, gaining global reimbursement, and furthering the understanding of the human impact of Abbott's Heart Failure products.

In his spare time, Kartik spends time with his wife, Ashwini, and twin boys, Dhruv and Atharv.

# ENGINEERING HALL *of* FAME

Membership in the Engineering Hall of Fame is reserved for individuals holding an engineering degree or honorary degree from Georgia Tech. Those selected have made meritorious engineering or managerial contributions during their careers.

**THOMAS BARNHARDT, III**

**GEN. PHILIP M. BREEDLOVE**

**MELINDA (MEL) COKER**

**DECIE BURNETT AUTIN COLEMAN**

**GOODMAN B. (G.B.) ESPY**

**TOM FANNING**

**DEBORAH KILPATRICK**

**CHRISTOPHER B. LOFGREN**

**RAY T. MUGGRIDGE, III**



## THOMAS BARNHARDT, III

**B.S.T.E. 1955**

President and chairman (retired),  
Barnhardt Manufacturing Company

Thomas is the former president and chairman of the board of Barnhardt Manufacturing Company. The family owned and operated cotton business started in 1900 in Charlotte, North Carolina, and is still located today on its original site. The company owns or manages seven manufacturing facilities in the United States, with its products distributed on six continents.

Thomas and his three sons were four of the company's 97 individual owners when Thomas was named president in 1989. They bought the company from the rest of the owners in 1996, and Thomas became chairman of the board soon thereafter.

From its beginnings as a supplier for buggy seats and horse collars, Barnhardt has deepened its commitment to fiber-based markets with an emphasis on cotton purification. Through acquisitions, the company has expanded into the dental, medical, pharmaceutical, beauty, furniture, mattress and carpet padding, foam, and insulation markets.



## GEN. PHILIP M. BREEDLOVE

**B.C.E. 1977**

Retired, United States Air Force

Distinguished Professor of the  
Practice, Sam Nunn School of  
International Affairs

Gen. Breedlove retired from the U.S. Air Force as NATO's Supreme Allied Commander, Europe (SACEUR) and commander of U.S. European Command in Stuttgart, Germany.

Prior to assuming his position as SACEUR, Gen. Breedlove served as the commander of U.S. Air Forces in Europe; commander of U.S. Air Forces in Africa; commander of Air Component Command, Ramstein; and director of the Joint Air Power Competence Centre in Kalkar, Germany. He was responsible for Air Forces activities in an area of operations covering more than 19 million square miles.

In his role as vice chief of the U.S. Air Force in 2011 and 2012, he presided over the Air Staff and served as a member of the Joint Chiefs of Staff Requirements Oversight Council and Deputy Advisory Working Group. He also assisted the chief of staff with organizing, training, and equipping 680,000 active-duty, Guard, Reserve, and civilian forces serving in the United States and overseas. His career also included a role as senior military assistant to the secretary of the Air Force.

Gen. Breedlove is a command pilot with 3,500 flying hours, primarily in the F-16, and has flown combat missions in Operation Joint Forge/Joint Guardian. In his career, he completed 11 overseas tours, including two remote tours.



## MELINDA (MEL) COKER

**B.E.E. 1987**

Executive Vice President  
of Strategy and Operations  
(retired), AT&T

Mel worked in the telecom, media, and technology industry for more than 30 years before retiring from AT&T in 2019. She led AT&T's strategy, consumer research, business analytics, and operations for its consumer line of business that served more than 135 million customers and generated \$110 billion in annual revenues. Mel also drove AT&T's 5G and fiber strategic investment and development plans and led the transformation of the consumer wireline business from legacy to next generation products.

Mel is the co-founder the EMBARC Program, a non-technical skills program equipping underrepresented engineering students to be successful and stand out as leaders in their first job after graduation.

Mel is an avid runner, completing 22 marathons to date. She's also active in the Atlanta community, including serving as chair of the Norcross First Methodist Church Creation Kids Preschool board and working with the Toco Hills Community Alliance to help those experiencing food insecurity.

Mel has served on the Georgia Tech Alumni Association Board of Trustees, ECE Advisory Board, and the ECE Diversity and Inclusion Council. She has contributed to Roll Call for 41 years and has endowed several Georgia Tech scholarships. Mel earned her Master of Business Administration from Georgia State University in 1991.



## DECIE BURNETT AUTIN COLEMAN

**B.S.Ch.E. 1980**

Vice President of Project  
Management, Global Projects  
Company (retired), ExxonMobil

Decie recently retired from ExxonMobil after more than 40 years developing and executing technology, operating upstream production, and major capital projects. In her role as vice president of project management for the Global Projects Company, Decie was responsible for supporting \$20 billion of project activities (75% overseas). Prior to that, she was responsible for leading project development and execution for Mozambique Liquefied Natural Gas (LNG), Papua New Guinea LNG, and several deep-water floating production systems offshore in Nigeria and the U.S. Gulf Coast. In addition, Decie has been responsible for supporting global upstream production operations and U.S. domestic natural gas sales.

Decie currently serves on the Georgia Tech Advisory Board and previously served on the Strategic Energy Institute Advisory Board and the Alumni Council. She is a member of the Academy of Distinguished Engineering Alumni and currently serves as the women's initiative co-chair for Greater Houston United Way.

Decie is married with two children, three stepchildren, and a granddaughter. She and her husband, Dan, are avid birdwatchers and travel the world to see new species. Decie has six lifelong girlfriends affectionately known as the "GT girls" who get together regularly to support each other, just like they did on campus.



**GOODMAN B. (G.B.) ESPY**

**B.M.E. 1957**

President (retired),  
OB-GYN Associates, P.A.

After graduating from Georgia Tech, G.B. earned his medical degree at Tulane in 1962. He completed his internship and residency at Charity Hospital of Louisiana and then served as president of OB-GYN Associates in Marietta, Georgia, from 1967 to 2014. G.B. is certified by the American Board of Obstetrics and Gynecology and was certified annually by the American College of Surgeons until 2013. He is a fellow of both organizations.

G.B. served as assistant physician for the Georgia Tech football team from 1966 to 1983 and was assistant chief venue medical officer for the press center at the 1996 Summer Olympics. He has traveled on missions around the world, including to Southeast Asia, Africa, Haiti, and the Middle East. He brought three children from Albania and Iraq to the U.S. for major surgeries with prolonged recoveries. He has supported students with scholarships for more than 50 years, including graduate and medical students. G.B. was a visiting professor at Georgia Tech and lecturer at Wellstar Kennestone Hospital and has contributed to medical literature on a variety of subjects. He was a member of the Woodruff School Advisory Board for 20 years and has served on the advisory board for the bioengineering graduate program since 1995.



**TOM FANNING**

**B.S.I.M. 1979, M.S.I.M. 1980,  
Hon. Ph.D. 2013**

Chairman and CEO,  
Southern Company

Tom was elected by Southern Company's board of directors in July 2010, became president the next month, and assumed the additional responsibilities of chairman and CEO later that year.

Tom has worked for Southern Company for more than four decades, holding 15 different positions in eight different business units. That includes numerous officer positions with a variety of Southern Company subsidiaries in finance, strategy, international business development, and technology. As COO, Tom was responsible for Southern Company's generation and transmission, engineering and construction services, research and environmental affairs, system planning, and competitive generation business units.

For nearly a decade, Tom served as co-chair of the Electricity Subsector Coordinating Council, which serves as the principal liaison between the federal government and the electric power sector to protect the electric grid from threats that could impact national security. He was recognized by the U.S. Senate with an appointment to the Cyberspace Solarium Commission, a group tasked with developing a protection strategy for the nation's cyberspace interests.

Tom sits on the advisory board of the Georgia Tech Scheller College of Business and the Board of Trustees of the Georgia Tech Foundation.

Tom earned bachelor's and master's degrees in industrial management and also was awarded an honorary Doctor of Philosophy degree from Georgia Tech. He lives in Atlanta with his wife, Sarah, and has four children.



**DEBORAH KILPATRICK**

**B.S.E.S.M. 1989,  
M.S.M.E. 1994,  
Ph.D.M.E. 1996**

Co-CEO and Executive Chair,  
Evidation Health

Deborah has spent the past 25 years in Silicon Valley in large companies and startups in the medical device, molecular diagnostic, and digital health arenas. She currently is the executive chair of the board at Evidation Health, whose technology platform gives global companies the ability to measure individual health and product benefit outside clinic walls via permissioned, person-generated data.

After earning her status in the “GT-cubed” club (three degrees at Tech), she began her healthcare career at Guidant Corporation in multiple leadership roles, including research fellow and director of research and development.

Deborah is on the board of directors for Sleep Number and the Task Force for Global Health, an international nonprofit organization working to improve health in the world’s most vulnerable populations and strengthen care delivery infrastructure in developing countries. A fellow of the American Institute of Medical and Biological Engineering, Deborah was the first woman to chair the advisory board for Georgia Tech’s College of Engineering. She has also delivered the Woodruff School’s Gegenheimer Lecture on Innovation.

She and her spouse, Kacey Fitzpatrick, are proud supporters of students and faculty at the Woodruff School and have established an endowment for the College’s Women in Engineering program.



**CHRISTOPHER B. LOFGREN**

**Ph.D.I.E. 1986**

Chairman and CEO,  
MatchBack Systems, Inc.

In addition to his role at MatchBack Systems, Chris serves as past chairman of the board for the U.S. Chamber of Commerce, where he has been a director since 2011. He served as chairman from 2020 to 2022.

Chris retired in 2019 from Schneider National, Inc., a provider of transportation and logistics services, after serving as president and CEO for 17 years. He was the first non-family CEO of the company, which was founded in 1935, and led the initial public offering in 2017. Before becoming CEO, Chris served as COO, president of Schneider’s logistics sector, and CIO. His career was marked by advancing the development and integration of technology within the operations of the company as well as applying data analytics and optimization technologies to enhance business performance. Before Schneider, Chris held positions at Symantec Corporation, Motorola, and CAPS Logistics.

In 2009, Chris was inducted into the National Academy of Engineering. He was previously inducted into the College’s Academy of Distinguished Engineering Alumni and the Council of Outstanding Young Engineering Alumni. Chris has served on numerous Georgia Tech advisory boards during the past 20 years and is a member of the Hill Society.



**RAY T. MUGGRIDGE, III**

**B.A.E. 1970**

Chairman,  
Bank of Camilla

Ray retired as president of Bank of Camilla in 2021 and is the current chairman. The bank was established more than 125 years ago as the first in South Georgia's Mitchell County.

Ray began his career at Camilla in 1979, first as a cashier and assisting the bank's president with the securities portfolio. He was appointed auditor and, in 1986, was elected to the bank's board. In 1992, he became president and chairman.

Ray has been active in Mitchell County for most of his life, including serving as president of the American Cancer Society and chairman of the chamber of commerce. He was appointed to the county's board of health in the late 1990s and has served as chairman for approximately 15 years.

Ray served in the U.S. Army Reserve from 1973 until 1981 after receiving his AE degree. He entered officer basic training at Aberdeen Proving Grounds, Maryland, and was commissioned in December 1973 as a second lieutenant in the Ordnance Corps for an eight-year obligation period. He was promoted to first lieutenant before receiving an honorable discharge in 1981.

In addition to his Georgia Tech degree, Ray earned an engineering associate degree from Middle Georgia College in 1968 and an MBA from Georgia State in 1974.

# Dean's

# APPRECIATION AWARD



The College of Engineering has many valued supporters who are regularly recognized and appreciated by the College. The Dean's Appreciation Award is a special honor for those individuals who have made extraordinary contributions to the advancement of the College of Engineering. The award may go to engineering alumni or to honor individuals who have brought distinction to the College and Georgia Tech.



**JOHN A. WHITE, JR.**

John's career as an engineering educator began in 1963 when he served as a tenure-track instructor at Virginia Tech, where he completed his master's degree. John would later teach at The Ohio State University while completing his doctorate. He returned to Virginia Tech for five years before joining Georgia Tech's faculty in 1975. He was appointed the Eugene C. Gwaltney Professor of Manufacturing and named a Regents' Professor in Industrial and Systems Engineering before he was "loaned" to the National Science Foundation (NSF) for three years to lead its engineering directorate.

A member of the National Academy of Engineering, John was appointed dean of the College in 1991 and served in that capacity until he returned to his undergraduate alma mater, the University of Arkansas, to be its chancellor in 1997. After 11 years as chancellor, he served full-time as an industrial engineering professor before "retiring" in 2019.

John continues to teach an online course for UA. He recently published *Why It Matters: Reflections on Practical Leadership*, which draws from his leadership experiences at NSF, Georgia Tech, and Arkansas, as well as his service on seven corporate boards of directors, his leadership of six professional organizations, and lessons learned from many others during his leadership journey.

# Associate DEANS



**KIMBERLY KURTIS**

Associate Dean for Faculty  
Development and Scholarship



**MITCHELL L. R. WALKER, II**

Associate Dean for  
Academic Affairs



**KRISTA WALTON**

Associate Dean for  
Research and Innovation



**DAMON P. WILLIAMS**

Associate Dean for  
Inclusive Excellence



**DOUGLAS WILLIAMS**

Senior Associate Dean

# School CHAIRS



**MARK COSTELLO**

William R.T. Oakes Chair,  
The Daniel Guggenheim School  
of Aerospace Engineering



**ALYSSA PANITCH**

Wallace H. Coulter Chair,  
The Wallace H. Coulter Department  
of Biomedical Engineering  
at Georgia Tech and Emory



**ARIJIT RAYCHOWDHURY**

Steve W. Chaddick Chair,  
The School of Electrical and  
Computer Engineering



**H. EDWIN ROMEIJN**

H. Milton and  
Carolyn J. Stewart Chair,  
The H. Milton Stewart School of  
Industrial and Systems Engineering



**CHRISTOPHER JONES**

John F. Brock, III Chair,  
The School of Chemical and  
Biomolecular Engineering



**DONALD WEBSTER**

Karen and John Huff Chair,  
The School of Civil and  
Environmental Engineering



**NATALIE STINGELIN**

Chair,  
The School of Materials Science  
and Engineering



**DEVESH RANJAN**

Eugene C. Gwaltney, Jr. Chair,  
The George W. Woodruff School  
of Mechanical Engineering

# History of the ALUMNI AWARDS

The College of Engineering Alumni Awards were created in 1994 under the leadership of John A. White during his tenure as dean. He passed the torch to Jean-Lou Chameau, former Georgia Tech provost and engineering dean, whose outstanding service to the College led him to receive the 2006 Dean's Appreciation Award from then-Dean Don P. Giddens, a Tech engineering alumnus. For the next six years, the program would fall under the guidance of Dean Gary S. May, who received his B.S. degree in electrical and computer engineering from Georgia Tech. In 2017, Steven W. McLaughlin was appointed dean and served until 2020, when he was named the Institute's provost. The Awards are now under the leadership of Dean Raheem A. Beyah, a native Atlantan who earned his Georgia Tech master's and Ph.D. degrees in electrical and computer engineering.

Each year, the College of Engineering recognizes select alumni who have contributed to the profession, advanced in their careers, and enhanced the lives of others both personally and professionally. These outstanding alumni are reviewed by committees within each of the College's eight schools and formally submitted for selection.

## Special Thanks

Sandra (Sandy) Magnus

CO-HOST

Chloe Weed

EnvE, Clark Scholar

STUDENT SPEAKER

Eileen Liu

CmpE, Clark Scholar

PIANIST

Tyra Grant

BME, Clark Scholar

Parker Sams

MSE, Dean's Scholar

Kian Zarbaf

AE, Clark Scholar

STUDENT VOLUNTEERS

Buzz

Georgia Tech Alumni Association —  
Ramblin' Wreck

Georgia Tech Alumni Band

College of Engineering Staff

# “*Ramblin’ Wreck*”

I’m a Ramblin’ Wreck from Georgia Tech, and a hell of an engineer  
A helluva, helluva, helluva, helluva, hell of an engineer.  
Like all the jolly good fellows, I drink my whiskey clear.  
I’m a Ramblin’ Wreck from Georgia Tech, and a hell of an engineer.

Oh! If I had a daughter, sir, I’d dress her in white and gold,  
And put her on the campus to cheer the brave and bold.  
But if I had a son, sir, I’ll tell you what he’d do —  
He would yell “To Hell with Georgia” like his daddy used to do.

Oh! I wish I had a barrel of rum and sugar three thousand pounds,  
A college bell to put it in and a clapper to stir it ’round.  
I’d drink to all good fellows who come from far and near.  
I’m a ramblin’, gamblin’, hell of an engineer.



Georgia Tech

College of  
Engineering