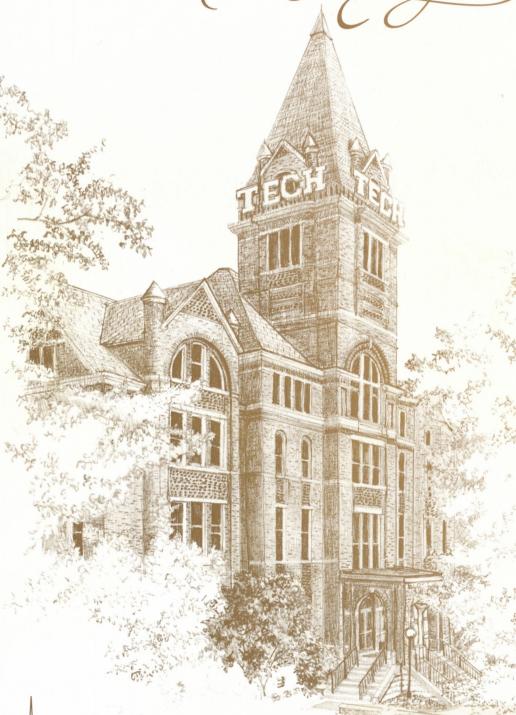
Commencement Ceremony



Georgia Institute
of Technology

spring NEYER



elcome to the 227th Commencement of the Georgia Institute of Technology. The entire Tech community extends cordial greetings to parents, spouses, relatives, and friends gathered here for this significant event.

For approximately 2,300 undergraduate and graduate students, today's ceremony recognizes their academic achievements at Georgia Tech and inaugurates a new era in their careers.

# Spring Semester • 9hD Ceremony May 3, 2007 • 7:00 p.m. • Ferst Center for the Arts\_

PROCESSIONAL Georgia Tech Commencement Ensemble,

coordinated by the Department of Music

MASTER OF CEREMONIES Dr. G. Wayne Clough, President

REFLECTION Rev. J. Al LaCour,

Campus Minister for International Students and Scholars

NATIONAL ANTHEM Georgia Tech Commencement Ensemble

COMMENCEMENT Dr. Raymond L. Orbach,

ADDRESS Undersecretary for Science,

U.S. Department of Energy

PRESENTATION OF Dr. Charles Liotta,

DOCTORAL DEGREE

Vice Provost for Research

CANDIDATES and Dean of Graduate Studies

CONFERRING Dr. Clough

OF DEGREES

INDUCTION INTO THE ALUMNI ASSOCIATION

Ms. Janice Wittschiebe, Class of 1978, 1980 Chair, Georgia Tech Alumni Association

ALMA MATER\*

Georgia Tech Commencement Ensemble

**FACULTY RECESSIONAL** 

Georgia Tech Commencement Ensemble

"RAMBLIN' WRECK" \*

Graduates and Audience

You are requested to refrain from loud expressions of pleasure for individual graduates. Such expressions detract from the recognition due the next graduate in line. Your cooperation is respectfully requested.

\*Please turn to page 37 for song lyrics.

# Spring Semester · Master's and Undergraduate Ceremony May 5, 2007 · 9:00 a.m. · Georgia Dome\_

PROCESSIONAL

Georgia Tech Commencement Ensemble, coordinated by the Department of Music

MASTER OF CEREMONIES

Dr. G. Wayne Clough, President

REFLECTION

Rev. Anthony Motley, Lindsay Street Baptist Church

NATIONAL ANTHEM

Georgia Tech Commencement Ensemble

COMMENCEMENT ADDRESS Mr. Jeffrey R. Immelt, Chairman and CEO, General Electric

PRESENTATION OF MASTER'S DEGREE CANDIDATES

Dr. Charles Liotta,
Vice Provost for Research
and Dean of Graduate Studies

CONFERRING OF DEGREES Dr. Clough

INTRODUCTION OF ACADEMIC DEANS

*Dr. Gary B. Schuster*, Provost and Vice President for Academic Affairs

PRESENTATION OF UNDERGRADUATE DEGREE CANDIDATES Dean Richard A. DeMillo College of Computing Dean Sue V. Rosser

Ivan Allen College of Liberal Arts
Interim Dean Douglas C. Allen
College of Architecture
Dean Steven R. Salbu
College of Management
Associate Dean Evans M. Harrell II

College of Sciences

Dean Don P. Giddens

College of Engineering

CONFERRING OF DEGREES

Dr. Clough

INDUCTION INTO THE ALUMNI ASSOCIATION

Ms. Janice Wittschiebe, Class of 1978, 1980 Chair, Georgia Tech Alumni Association

ALMA MATER\*

Georgia Tech Commencement Ensemble

FACULTY RECESSIONAL

Georgia Tech Commencement Ensemble

"RAMBLIN' WRECK" \*

Graduates and Audience

The listing of master's degree graduates begins on page 13.

Honors Qualifications: Honor designations are for undergraduates at Georgia Tech who have met the minimum residency hours requirement of seventy hours, as well as the minimum GPA.

To achieve honor, the minimum GPA is 3.15.

To achieve high honor, the minimum GPA is 3.35.

To achieve highest honor, the minimum GPA is 3.55.

Changes in honor status may also occur after final printing.

You are requested to refrain from loud expressions of pleasure for individual graduates. Such expressions detract from the recognition due the next graduate in line. Your cooperation is respectfully requested.

\*Please turn to page 37 for song lyrics.



# Doctoral Degree Candidates.

#### Doctor of Philosophy Paper Science Engineering

Robert McGuire Lowe Jr.
Thesis: "The Deformation
Behavior of Wet-fiber
Lignocellulosic Fibers"
Advisor: Dr. Arthur J.
Ragauskas

Se-Young Yoon
Thesis: "Bonding Material
Coated Clay for Improving
Paper Properties"
Advisor: Dr. Yulin Deng

#### Doctor of Philosophy Bioengineering

Mahesh Chandra Dodla
Thesis: "Bioengineered
Scaffolds for Peripheral
Nerve Regeneration"
Advisor: Dr. Ravi Bellamkonda

Ioannis Sechopoulos
Thesis: "Investigation of
Physical Processes in Digital
X-ray Tomosynthesis Imaging
of the Breast"
Advisor: Dr. Andrew Karellas

Christopher Garrison Wilson
Thesis: "Mechanisms
and Functional Implications
of Aggrecan Catabolism
in Cartilage and Meniscal
Fibrocartilage"
Advisor: Dr. Marc E. Levenston

Yan Yang
Thesis: "Image Segmentation
and Shape Analysis of Blood
Vessels with Applications to
Coronary Atherosclerosis"
Advisor: Dr. Don P. Giddens

#### Doctor of Philosophy Biomedical Engineering

Craig Lewis Duvall
Thesis: "The Role of
Osteopontin in Postnatal
Vascular Growth:
Functional Effects
in Ischemic Limb Collateral
Vessel Formation and Long
Bone Fracture Healing"
Advisor: Dr. William R. Taylor

Jeffrey D. Gross
Thesis: "Noninvasive
Monitoring of Oxygen
Concentrations and Metabolic
Functions in Pancreatic
Substitutes"
Advisor: Dr. Athanassios
Sambanis

Kevin Robert Johnson
Thesis: "In Vivo Coronary Wall
Shear Stress Determination
Using CT, MRI, and
Computational Fluid
Dynamics"
Advisor: Dr. John N. Oshinski

Gloria Jung-A. Kim
Thesis: "Cancer Nanotechnology:
Engineering Multifunctional
Nanostructures for Targeting
Tumor Cells and Vasculatures"
Advisor: Dr. Shuming Nie

Gelsy Torres Oviedo
Thesis: "Robust Muscle
Synergies for Postural Control"
Advisor: Dr. Lena H. Ting

#### Doctor of Philosophy Computer Science

Manish Jain
Thesis: "End-to-End Available
Bandwidth Estimation and
Its Applications"
Advisor: Dr. Konstantinos
Dovrolis

Kristin Kaster Lamberty
Thesis: "Getting and Keeping
Children Engaged with a
Constructionist Design Tool
for Craft and Math"
Advisor: Dr. Janet L. Kolodner

Mohamed S. Mansour
Thesis: "Behavior Isolation in
Enterprise Systems"
Advisor: Dr. Karsten Schwan

Jochen F. Rick
Thesis: "Personal Home Pages
in Academia: The Medium, Its
Adopters, and Their Practices"
Advisor: Dr. Mark Guzdial

Sridhar Srinivasan
Thesis: "Design and Use of
Managed Overlay Networks"
Advisor: Dr. Ellen Zegura

Robert Brooks VanHorn III
Thesis: "Procedural
Reduction Maps"
Advisor: Dr. Greg Turk

Zhiyuan Zhan
Thesis: "Meeting Data Sharing
Needs of Heterogeneous
Distributed Users"
Advisor: Dr. Mustaque
Ahamad

#### Doctor of Philosophy Public Policy

Eunjoo Oh
Thesis: "Project Organization,
Diverse Knowledge, and
Innovation Systems in the
Korean Game Software
Industry"
Advisor: Dr. Philip P. Shapira

#### Doctor of Philosophy Architecture

Non Khuncumchoo
Thesis: "Roof Maintenance
Record Analysis Toward
Proactive Maintenance
Policies"
Advisor: Dr. Linda M. Thomas

Lynn Michelle Patterson
Thesis: "Local Economic
Development Agencies'
Support for Construction and
Demolition Recycling"
Advisor: Dr. Nancey G. Leigh

#### Doctor of Philosophy Management

Beng Wee Goh
Thesis: "Internal Control
Failures and Corporate
Governance Structures: A
Post Sarbanes-Oxley Act
(SOX) Analysis"
Advisor: Dr. Bryan K. Church

Erik Daniel Lystad
Thesis: "Simple Newsvendor
Heuristics for Inventory
Distribution Networks"
Advisor: Dr. Mark E. Ferguson

### Doctor of Philosophy Earth and Atmospheric Sciences

Yanping He
Thesis: "Representations of
Boundary-layer
Cloudiness and Surfacewind Probability Distributions
in Subtropical Marine Stratus
and Stratocumulus Regions"
Advisor: Dr. Robert Dickinson

Jean-Francois Koprivnjak
Thesis: "Natural Organic
Matter: Isolation and
Bioavailability"
Advisor: Dr. E. Michael Perdue

#### Doctor of Philosophy Psychology

Richard Philip Heitz
Thesis: "Neural Correlates of
Speed-Accuracy Tradeoff:
An Electrophysiological
Analysis"
Advisor: Dr. Randall W. Engle

#### Doctor of Philosophy Physics

James Mitchell Allmond
Thesis: "Studies of Triaxial
Rotor and Band Mixing
in Nuclei"
Advisor: Dr. John L. Wood

Kevin Michael Fortier
Thesis: "Individually
Trapped Atoms for Use Cavity
QED Quantum Information
Applications"
Advisor: Dr. Michael S.
Chapman

Xiaoshan Xu
Thesis: "Magnetism of Free
Cobalt Clusters Measured in
Molecular Beams"
Advisor: Dr. Walter A. DeHeer

#### Doctor of Philosophy Chemistry

Yasuko Antoku
Thesis: "Fluorescent
Polycytosine-encapsulated
Silver Nanoclusters"
Advisor: Dr. Robert M.
Dickson

Kristi Lee Burns
Thesis: "An Exploration
of Biochemistry Including
Biotechnology, Structural
Characterization, Drug
Design, and Chromatographic
Analyses"
Advisor: Dr. Sheldon W. May

Warren William Gerhardt
Thesis: "Towards Supramolecular Multifunctional
Architectures"
Advisor: Dr. Marcus Weck

Erik Jonas Jarvholm
Thesis: "Mechanisms
and Development of Etch
Resistance for Highly
Aromatic Monomolecular Etch
Masks Towards Molecular
Lithography"
Advisor: Dr. Laren M. Tolbert

Jongseong Kim
Thesis: "Stimuli-Responsive
Hydrogel Microlenses"
Advisor: Dr. L. Andrew Lyon

Christopher Don Lane
Thesis: "Low-energy, Electroninduced Processes in
Molecular Thin Films
Condensed on Silicon and
Titanium Dioxide Surfaces"
Advisor: Dr. Thomas Orlando

Jonathan Gilbert McGrath
Thesis: "Synthesis and
Characterization of Core/
Shell Hydrogel Nanoparticles
and Their Application to
Colloidal Crystal Optical
Materials"
Advisor: Dr. L. Andrew Lyon

Nicola Menegazzo
Thesis: "A Novel Approach
to Diamond-like Carbonbased Mid-Infrared
Attenuated Total Reflectance
Spectroelectrochemistry"
Advisor: Dr. Boris Mizaikoff

Jeremy M. Moix
Thesis: "Molecular Dynamics
and Stochastic Simulations
of Surface Diffusion"
Advisor: Dr. Rigoberto
Hernandez

Susnata Samanta
Thesis: "Reversible Carbon
Dioxide Gels Synthesis and
Characterization of Energetic
Ionic Liquids Synthesis and
Characterization of Tertrazole
Monomers and Polymers
Encapsulation of Sodium
Azide for Controlled Release"
Advisor: Dr. Charles L. Liotta

Berhane Temelso
Thesis: "Computation of
Molecular Properties at the
Ab Initio Limit"
Advisor: Dr. C. David Sherrill

Tracey Lyn Thaler
Thesis: "Search for
Extraterrestrial Life Using
Chiral Molecules: Mandelate
Racemase as a Test Case"
Advisor: Dr. Andreas S.
Bommarius

#### 7.hen 7.hou

Thesis: "Development of Polymer Electrolyte Membranes for Fuel Cells to be Operated at High Temperature and Low Humidity" Advisor: Dr. C. P. Wong

#### Doctor of Philosophy Materials Science and Engineering

Charles Edward Compson
Thesis: "Design, Fabrication, and Characterization of
Novel Planar Solid Oxide
Fuel Cells"
Advisor: Dr. Meilin Liu

William Arthur Counts
Thesis: "Predicting the HallPetch Effect in FCC Metals
Using Non-local Crystal
Plasticity"
Advisor: Dr. Ashok Saxena

Daniel Edward Eakins
Thesis: "Role of Heterogeneity
in the Chemical and
Mechanical Shock-Response
of Nickel and Aluminum
Powder Mixtures"
Advisor: Dr. Naresh N.
Thadhani

Davy Paul Gaillot
Thesis: "Optical Properties
of Complex Periodic Media
Structurally Modified by
Atomic Layer Deposition"
Advisor: Dr. Christopher
Summers

V. Siva Kumar G. Kelekanjeri
Thesis: "Nondestructive
Electrical Characterization
of Controlled Waspaloy
Microstructures"
Advisor: Dr. Rosario A.
Gerhardt

Scott Ian Lieberman
Thesis: "Microstructural
Characterization, Visualization,
and Simulation of Ti-B
Materials"
Advisor: Dr. Arun M. Gokhale

Matthew David Trexler
Thesis: "The Relationship
of Microstructure to Fracture
and Corrosion Behavior
of Directionally Solidified
Superalloy"
Advisor: Dr. Thomas H.
Sanders

Jeremy Duane Walker
Thesis: "Exploring the
Synthesis and Characterization of Nanoenergetic
Materials from Sol-Gel
Chemistry"
Advisor: Dr. Rina Tannenbaum

#### Doctor of Philosophy Textile Engineering

Huina Guo
Thesis: "Structure,
Processing, and Properties
of Polyacrylonitrile/Carbon
Nanotube Composite Films"
Advisor: Dr. Satish Kumar

Jing Liu
Thesis: "Carbon Nanotube/
Polymer Composites and
Novel Micro-and Nanostructured Electro-spun Polymer
Materials"
Advisor: Dr. Satish Kumar

Tong Wang
Thesis: "Electro-spun Carbon
Nanofibers for Electrochemical Capacitors"
Advisor: Dr. Satish Kumar

#### Doctor of Philosophy Industrial Engineering

Aphiwat Charnprasitphon
Thesis: "Modeling and
Analysis of the Batch
Production Scheduling
Problem for Perishable Products with
Set-up Times"
Advisor: Dr. Faiz A.
Al-Khayyal

Brian Haskel Fralix
Thesis: "Stability and
Nonstationary Characteristics
of Queues"
Advisor: Dr. Richard Serfozo

Burak Karacik
Thesis: "Driver Management
for Less-than-Truckload
Carriers"
Advisor: Dr. Mathieu W.
Savelsbergh

Jong Phil Kim
Thesis: "Efficient Confidence
Interval Methodologies for
the Noncentrality Parameters
of Noncentral t-Distributions"
Advisor: Dr. Anthony J. Hayter

Seunghyun Kong
Thesis: "Linear Programming
Algorithms Using Leastsquare Method"
Advisor: Dr. Ellis L. Johnson

Gultekin Kuyzu
Thesis: "Procurement in
Truckload Transportation"
Advisor: Dr. Mathieu W.
Savelsbergh

Yufeng Yao
Thesis: "Topics in
Fractional Airlines"
Advisor: Dr. Ozlem Ergun

#### Doctor of Philosophy Aerospace Engineering

Nazmiye Acikgoz
Thesis: "Adaptive and
Dynamic Meshing Methods
for Numerical Simulations"
Advisor: Dr. Carlo L. Bottasso

Patrick Thomas Biltgen
Thesis: "A Methodology for
Capability-based Technology
Evaluation for System-of-Systems"
Advisor: Dr. Dimitrios N. Mavris

Marcus Domenic Cappelli
Thesis: "The Evolution of
Multi-site Small Cracks
under Fatigue Loading"
Advisor: Dr. George
Kardomateas

Hossam Abd El-Raouf El-Asrag Thesis: "Large-eddy Simulation Subgrid Model for Soot Prediction" Advisor: Dr. Suresh Menon

Brian Joseph German
Thesis: "A Riemannian
Geometric Mapping
Technique for Identifying
Incompressible Equivalents
to Subsonic Potential Flows"
Advisor: Dr. Dimitrios N.
Mayris

Timothy Salim Kokan
Thesis: "Characterizing
High-energy Density
Propellants for Space
Propulsion Applications"
Advisor: Dr. John R. Olds

Yongchang Li
Thesis: "An Intelligent,
Knowledge-based, Multiplecriteria, Decision-making
Advisor for Systems Design"
Advisor: Dr. Dimitrios N.
Mayris

Zhijie Lu
Thesis: "Data Management in an Object-oriented, Distributed Aircraft Conceptual Design Environment"
Advisor: Dr. Dimitrios N. Mayris

Taewoo Nam
Thesis: "A Generalized Sizing
Method for Revolutionary
Concepts under Probabilistic Design Constraints"
Advisor: Dr. Dimitrios N.
Mavris

Tudor Ioan Palaghita
Thesis: "Combustor Exhaust
Temperature Nonuniformity
Sensing Using Diode Laser
Absorption"
Advisor: Dr. Jerry M. Seitzman

Hongjun Ran
Thesis: "A Framework for
Determination of the Weak
Pareto Frontier Solutions
under Probabilistic
Constraints"
Advisor: Dr. Dimitrios N.
Mayris

Reuben Ray Rohrschneider
Thesis: "Variable-fidelity
Hypersonic Aeroelastic
Analysis of Thin-film
Ballutes for Aerocapture"
Advisor: Dr. Robert D. Braun

Carlos Michael Roithmayr
Thesis: "Relating Constrained
Motion to Force through
Newton's Second Law"
Advisor: Dr. Dewey H. Hodges

Victoria Katherine Thomas
Thesis: "A Modeling for
Scenario-based Risk
Assessment for Robust
Aerospace Systems"
Advisor: Dr. Dimitrios N.
Mayris

Shannon Sue Twigg
Thesis: "Optimal Path
Planning for Single and
Multiple Aircraft Using a
Reduced Order Formulation"
Advisor: Dr. Eric N. Johnson

David Anthony Young
Thesis: "An Innovative
Methodology for Allocating
Reliability and Cost in a Lunar
Exploration Architecture"
Advisor: Dr. Alan W. Wilhite

Wei Zhao
Thesis: "Feature-based
Hierarchical Knowledge
Engineering for Aircraft
Life-cycle Design Decision
Support"
Advisor: Dr. Dimitrios N.
Mayris

#### Doctor of Philosophy Chemical Engineering

Raymond William Chafin II
Thesis: "Torlon and Silicate
Mixed-matric Membranes
for Xylene Isomer Separation"
Advisor: Dr. William J. Koros

Ate He

Thesis: "Fabrication of Highperformance Chip-to-Substrate Input/Output Interconnections" Advisor: Dr. Paul A Kohl

Charu Lata Shukla
Thesis: "Computationally
Probing the Cybotactic
Region of Gas-expanded
Liquids"
Advisor: Dr. Charles A. Eckert

Zhengcai Ye
Thesis: "UV Disinfection
between Concentric Cylinders"
Advisor: Dr. Larry J. Forney

#### Doctor of Philosophy Environmental Engineering

Adile Evren Tugtas
Thesis: "Effect of Nitrate
Reduction on Methanogenic
Fermentation: Process
Interactions and Modeling"
Advisor: Dr. Spyros G.
Pavlostathis

#### Doctor of Philosophy Civil Engineering

Takao Adachi
Thesis: "Impact of Cascading Failures on Performance
Assessment of Civil
Infrastructure System"
Advisor: Dr. Bruce R.
Ellingwood

John Timothy Crocker

Thesis: "Organizational Arrangements for the Provision of Cross-boundary Transport Infrastructure and Services" Advisor: Dr. Michael D. Meyer

Chunxia Feng

Thesis: "Transit Bus Loadbased Modal Emission Rate Model Development" Advisor: Dr. Randall L. Guensler

Monique CaSandra Hite

Thesis: "Evaluation of the Performance of Bridge Steel Pedestals under Low Seismic Loads" Advisor: Dr. Reginald DesRoches

#### Kursat Kinali

Thesis: "Seismic Fragility Assessment of Steel Frames in the Central and Eastern United States" Advisor: Dr. Bruce R. Ellingwood

Jamie Ellen Padgett

Thesis: "Seismic Vulnerability Assessment of Retrofitted Bridges using Probabilistic Methods" Advisor: Dr. Reginald DesRoches

#### Doctor of Philosophy Electrical and Computer Engineering

Guillermo Acosta-Marum
Thesis: "Measurement,
Modeling, and OFDM
Synchronization for
the Wideband Mobile-

to-Mobile Channel" Advisor: Dr. Mary Ann Ingram

Pranav Anbalagan

Thesis: "Limitations and Opportunities for Wire Length Prediction in Gigascale Integration" Advisor: Dr. Jeffrey A. Davis Ramanan Bairavasubramanian

Thesis: "Development of Microwave/Millimeterwave Antennas and Passive Components on Multilayer Liquid Crystal Polymer (LCP) Technology" Advisor: Dr. John Papapolymerou

Zesheng Chen

Thesis: "Modeling and Defending against Internet Worm Attacks" Advisor: Dr. Chuanyi Ji

Munkang Choi

Thesis: "Modeling of Deterministic Within-Die Variation in Timing Analysis, Leakage Current Analysis, and Delay Fault Diagnosis" Advisor: Dr. Linda Milor

SeungKeun Choi

Thesis: "A Micromachined Magnetic Field Sensor for Low-power Electronic Compass Applications" Advisor: Dr. Mark G. Allen

Cleon Edwin Davis

Thesis: "Modeling, Optimization, Monitoring, and Control of Polymer Dielectric Curing by Variable Frequency Microwave Processing" Advisor: Dr. Gary S. May

Gerald Reuben DeJean II

Thesis: "Design, Modeling, and Optimization of Compact Broadband and Multiband 3D System-on-Package (SOP) Antenna Architectures for Wireless Communications and Millimeter-wave Applications" Advisor: Dr. Emmanouil M. Tentzeris

Babak Firoozbakhsh

Thesis: "Studies in Wireless Home Networking Including Coexistence of UWB and IEEE 802.11a Systems" Advisor: Dr. Nikil S. Jayant Shalabh Goyal

Thesis: "Efficient Testing of High-performance Data Converters Using Lowcost Test Instrumentation" Advisor: Dr. Abhijit Chatterjee

Dong-Hoon Han

Thesis: "Built-in Self Test and Calibration of RF Systems for Parametric Failures" Advisor: Dr. Abhijit Chatterjee

William Cory Hawkins

Thesis: "Evaluation of the Data Vortex Photonic Alloptical Path Interconnection Network for Next-generation Supercomputers" Advisor: Dr. Donald S. Wills

Woonhaing Hur

Thesis: "Incremental Redundancy Low-density Parity-check Codes for Hybrid FEX/ARQ Schemes" Advisor: Dr. Steven W. McLaughlin

Afroz M. Imam

Thesis: "Condition Monitoring of Electrolytic Capacitors in Power Electronics Applications" Advisor: Dr. Ronald G. Harley

Hongkyu Kim

Thesis: "Architectural Enhancements for Efficient Operand Transport in Multimedia Systems" Advisor: Dr. Donald S. Wills

Hyung-Joon Kim

Thesis: "Low-complexity
Mode Selection for RateDistortion Optimal Video
Coding"
Advisor: Dr. Yucel Altunbasak

Nickolas Dana Kingsley

Thesis: "Development of Miniature, Multilayer, Integrated, Reconfigurable RF MEMS Communication Module on Liquid Crystal Polymer (LCP) Substrate" Advisor: Dr. John Papapolymerou

Ramkumar Krithivasan Thesis: "Design of High-speed

SiGe HBT BiCMOS Circuits for Extreme Environment Applications"

Advisor: Dr. John D. Cressler

Dalong Li

Thesis: "Restoration of Atmospheric Turbulencedegraded Video Using Kurtosis Minimization and Motion Compensation" Advisor: Dr. Russell M. Mersereau

Xiaohuan Li

Thesis: "Multiple Global Affine Motion Models Used in Video Coding" Advisor: Dr. Joel R. Jackson

Guanglei Liu

Thesis: "Management and Control of Scalable and Resilient Next-generation Optical Networks" Advisor: Dr. Chuanyi Ji

Yuan Lu

Thesis: "Design of High-speed SiGe HBT Circuits for Wideband Transceivers" Advisor: Dr. John D. Cressler

Tejas R. Mehta

Thesis: "Optimal, Multimodal Control with Applications in Robotics" Advisor: Dr. Magnus Egerstedt

Pelham David Norville

Thesis: "Time-reversal Techniques in Seismic Detection of Buried Objects" Advisor: Dr. Waymond R. Scott

Michael Steven Reid

Thesis: "The Role of Heterogeneity in Rhythmic Networks of Neurons" Advisor: Dr. Stephen P. DeWeerth Brian Michael Rivera

Thesis: "Using Terrain and Location Information to Improve Routing in Ad hoc Networks" Advisor: Dr. Henry W. L. Owen

Robert Allen Robinson Jr.

Thesis: "An Electroacoustic Analysis of Transmission-line Loudspeakers" Advisor: Dr. William M. Leach

Laura Elizabeth Rowe

Thesis: "An Active Microscaffold System with Fluid Delivery and Stimulation/Recording Functionalities for Culturing 3-D Neuronal Networks" Advisor: Dr. Albert B. Frazier

Sunil Ravidra Shukla

Thesis: "Improving Highquality Concatenative Text-to-Speech Synthesis Using the Circular Linear Prediction Model" Advisor: Dr. Thomas P. Barnwell

Charles Robert Simpson Jr.

Thesis: "Analysis of Passive End-to-End Network Performance Measurements" Advisor: Dr. George F. Riley

Otis Lkuwamy Smart

Thesis: "Evolutionary Algorithms and Frequent Item-set Mining for Analyzing Epileptic Oscillations" Advisor: Dr. George Vachtsevanos

Dheeraj Reddy Subbareddy

Thesis: "Correct, Efficient, and Realistic Wireless Network Simulations" Advisor: Dr. George F. Riley

Elmoustapha Ould Ahmed Vall

Thesis: "Algorithms for Selforganizing Wireless Sensor Networks" Advisor: Dr. George F. Riley Rajbabu Velmurugan

Thesis: "Implementation Strategies for Particle Filterbased Target Tracking" Advisor: Dr. James H. McClellan

Long Wu

Thesis: "Separating Load Torque Oscillation and Rotor Faults in Stator Current Based-Induction Motor Condition Monitoring" Advisor: Dr. Thomas G. Habetler

Fang Yang

Thesis: "A Comprehensive Approach for Bulk Power System Reliability Assessment" Advisor: Dr. A. P. Meliopoulos

Yong-Kee Yeo

Thesis: "Dynamically Reconfigurable Optical Buffer and Multicast-enabled Switch Fabric for Optical Packet Switching" Advisor: Dr. Gee-Kung Chang

Chendong Zhu

Thesis: "The Mixed-mode Reliability Stress of Silicon-Germanium Heterojunction Bipolar Transistors" Advisor: Dr. John D. Cressler

Doctor of Philosophy Nuclear and Radiological Engineering

Marat Radikovich Seidaliev
Thesis: "Development and Test of
a GEM-based TEPC for Neutron
Protection Dosimetry"
Advisor: Dr. C. K. Wang



#### Doctor of Philosophy Mechanical Engineering

Ulf Christian Andresen
Thesis: "Supercritical Gas
Cooling and Near-critical
Pressure Condensation
of Refrigerant Blends in
Microchannels"
Advisor: Dr. Srinivas Garimella

Michael Richard Haberman
Thesis: "Design of High-loss,
Viscoelastic Composites
through Micromechanical
Modeling and Decisionbased Material by Design"
Advisor: Dr. Yves H. Berthelot

Jungchul Lee
Thesis: "Fabrication,
Characterization, and Application of Multifunctional
Microcantilever Heaters"
Advisor: Dr. William P. King

Qiang Li
Thesis: "Effects of Adaptive
Discretization on Numerical
Computation Using Meshless
Method with Live-object
Handling Applications"
Advisor: Dr. Kok-Meng Lee

Rajesh Luharuka
Thesis: "An Electromagnetically Actuated Rotary
Gate Microvalve with
Bistability"
Advisor: Dr. Peter J. Hesketh

Brent Allen Nelson
Thesis: "Nanoscale Thermal
Processing Using a Heated
Atomic Force Microscope Tip"
Advisor: Dr. William P. King

Ashley Wells Palmer
Thesis: "Investigations of the Composition-Function Relationships in Normal, Degraded, and Engineered Articular Cartilage Using EPIC-Microcomputed Tomography"
Advisor: Dr. Marc E. Levenston

Keunhan Park
Thesis: "Thermal Characterization of Heated
Microcantilevers and a Study
on Near-field Radiation"
Advisor: Dr. Zhuomin Zhang

Min Pei
Thesis: "Effects of Lanthanum
Doping on the Microstructure
and Mechanical Behavior of
an SnAg Alloy"
Advisor: Dr. Jianmin Qu

Andrew E. Perkins
Thesis: "Investigation and
Prediction of Solder Joint
Reliability for Ceramic Area
Array Packages under Thermal
Cycling, Power Cycling, and
Vibration Environments"
Advisor: Dr. Suresh K.
Sitaraman

Harry Dwight Rowland
Thesis: "Thermomechanical
Manufacturing of Polymer
Microstructures and
Nanostructures"
Advisor: Dr. William P. King

Thomas Paul Smith
Thesis: "Hardware Simulation
of Fuel Cell/Gas Turbine
Hybrids"
Advisor: Dr. William J. Wepfer

Brian Henry Wayman
Thesis: "Arterial Response
to Local Mechanical
Variables in Organ Culture:
The Effects of Circumferential
and Shear Stress"
Advisor: Dr. Raymond P. Vito

Jie Yang
Thesis: "Spatial Coherence in a
Shallow Water Waveguide"
Advisor: Dr. Peter Rogers

Sungshik Yim
Thesis: "A Retrieval Method
(DFM Framework) for
Automated Retrieval of
Design for Additive Manufacturing Problems"
Advisor: Dr. David W. Rosen

# Master's Degree Candidates.

Master of Science

Douglas Scott Aaron Environmental Engineering

Timothy Edward Abrahamson Economics

Rakesh Achanta Electrical and Computer Engineering

Nawaf I. Almoosa Electrical and Computer Engineering

Jaidev Sanjay Amrite Electrical and Computer Engineering

Krishna Bharath
Electrical and Computer
Engineering

Guillermo Gallego Bonet Electrical and Computer Engineering

Adam Thomas Boyd Mechanical Engineering

Benjamin David Brady Aerospace Engineering

Nishank Niranjan Chandawala Electrical and Computer Engineering

Alia Chaturapruek Environmental Engineering

Don Michael Clark Aerospace Engineering

Stephen James Conschafter Architecture

Sean Patrick Dalton Civil Engineering

Jeffery Li Ding Aerospace Engineering

Hiral Kiran Doshi Electrical and Computer Engineering

Scott Crawford Driscoll Architecture

Victor Duarte Management Benoit Favre
Civil Engineering

Anup Avinash Gadgil
Aerospace Engineering

Gence Genc Civil Engineering

Erin Nicole Gibbons Civil Engineering

Upendra Arvind Godse Electrical and Computer Engineering

Abhilash Goyal Electrical and Computer Engineering

*James Richard Henson Jr.* Civil Engineering

Christopher Michael Herndon Architecture

*Brian Robert Hirsh* Aerospace Engineering

Bharat Jayakumar Electrical and Computer Engineering

Tae-Kwang Jeon Electrical and Computer Engineering

Benjamin Philipp Jonen Economics

Aditya Prakash Joshi Electrical and Computer Engineering

Sandeep Kakumanu Electrical and Computer Engineering

Bryan Mills Karpowicz Earth and Atmospheric Sciences

Smitha Kartik Economics

Neha Sadashiv Kelkar Electrical and Computer Engineering

Matthew Edward Kontz Electrical and Computer Engineering

Sudhindra Aithal Kota Electrical and Computer Engineering Jaesup Lee Civil Engineering

*Lei Lei*Economics

Sermpun Lhamlhak Chemistry

Clarissa Sucupira Andrade Lima Architecture

Shenshen Lin Industrial Engineering

Mathew Joseph Livianu Electrical and Computer Engineering

James Gregory Malcolm Electrical and Computer Engineering

Jeffrey Loren Marx Aerospace Engineering

Tahiru M. J. Mawia Civil Engineering

Robert Edward Moore Jr. Architecture

Jennifer Indech Nelson Civil Engineering

Anh-Lan A. Nguyen Management

Benjamin Passenberg Electrical and Computer Engineering

Jorge Luis Quevedo De Los Santos Electrical and Computer Engineering

Kyle M. Rahrig Aerospace Engineering

Gary Patrick Schwaiger Environmental Engineering

Theo Sesostris Management

Kinjal Girish Shah Environmental Engineering

Rui Sun
Electrical and Computer
Engineering

Nitya Sundareswaran Electrical and Computer Engineering

Abdemanaf S. Tambawala Electrical and Computer Engineering

Roberto Antonio Uzcategui Electrical and Computer Engineering

Sohaib Waheed Electrical and Computer Engineering

*Bryan James Walrath* Architecture

Chao Wang Electrical and Computer Engineering

Latrice Danette Watkins Architecture

Carolina Weber
Electrical and Computer
Engineering

Dong Hyuk Woo Electrical and Computer Engineering

Jiahui Yuan Electrical and Computer Engineering

Aristidis Zachas Electrical and Computer Engineering

Mengni Zhang Earth and Atmospheric Sciences

Zhijun Zhao Earth and Atmospheric Sciences

#### Master of Science in Quantitative and Computational Finance

Richard A. Davis
Matthias Fleckenstein
Vivek Kumar Gupta
Kevin George Klinedinst
Rui Li
Xuemei Li
Jakkapan Luangnarumitchai

#### Master of Business Administration–Global Business Cesar Augusto Rojas E.

Master of Science in Human-Computer Interaction

Angela Elizabeth Scott

Jonathan Ryan Austin Nils Theodore Beck Celeste Alena Buckhalter Callie Boothe Carroll Chesshire Lee Gaylor Shivam Goval Daniel Michael Greenblatt Sarah Elise Greer Lan Guo Gaurishankar Krishnan Adeline Y. Lee Travis Iames Little Jahmeilah Amir Richardson Nithya Sambasivan Daniel Lawrence Shaw Judith Maria Siegel Chih-Sung Wu

Master of Science in Bioengineering

Laura-Lee Amelia Catherine Farrell Michael Scott Ivey Priyanka Karan Komal Rambani Weiwei Yin

#### Master of Science in Statistics

Yuyuan Han Huijing Jiang Rui Li Melike Meterelliyoz Cheng Yi Ong Jie Zhu

Master of Science in Information Security

Italo Ivan Dacosta Tracey Sara Diamond Stacy Soo Yeon Kim Christopher Scott Lewis Frank Beom-Shik Park Kandha Kandaswamy Sankarapandian Jennifer C. Stoll Master of Science in Computer Science

Iessica Eulonda Abraham Summer Lea Adams Giovanni Albani David Denus Aperu Diane Anais Artore Keshav Sethi Attrey Benjamin Myer Axelrod Ii Han Bae Tushar Virender Bansal Asmita Avinash Barve Sebastien Beaudet Thibault Bizollon Garrett Franklin Boyer Peter Alan Calvert Craig Chapin Cambias Stephen I. Campos Zain Moziz Chandan Ramesh Chandran Saurabh Prasann Chobe Neil Brandon Cutshaw Myungcheol Doo Mario Y. El Khoury Izzet Can Envarli Iulien Nicolas Francoi Fournel Nikhil Navin Gandhi Sanjeev Gourishankar Topraj Gurung Emilie Haynes Guillaume-Jean Herbiet Clinton Daniel Hidinger Lorenzo Ibarria Arya John Irani Ankita Jain Manas Shrirang Khadilkar Kihwan Kim Victor Kovalev Panchapagesan Krishnamurthy Arvind Kumar Jin Han Lee Sangmin Lee Sheena LaSha Lewis Han Long Lu Michel Mansour Eric Beowulf Martinson Ellen Joy Matthews Christian Manfred Menkens Adam Shaun Morber Gregory Jean-Michel Nou Eniola O. Okeowo Gopal Pai Jason Dilip Parekh Nirmal I. Patel Pritesh Ishvar Patel Joseph Varun Patrao Barath Christopher Petit Nalini Polavarapu

Rachel Claire Post Stefan Puchner Alexander James Rudnick Rucheek Hasmukh Sangani Puravkumar Bharatkumar Saraiya Alkesh Navinchandra Shah Manu Sharma Kanupriya Singhal Sandhya Sivaramakrishnan Raniith Subramanian Olivier Tayeg Nirmal Amritlal Thakker Aditi Milind Thanekar Aajav Jyotindra Neeta Trivedi Suhaib Ur Rehman Guru Prasadh Venkataramani McPherson LeMoune White Brandon Malott Whitley Qiushuang Zhang

Master of Science in International Affairs

Michael Printy Arthur Phillip Guthrie Autry Rachael Marie Brennaman Tarun Chaudhary Hassan J. Chaudhri Kevin Michael Davis Britta Nora Froelicher Xintong Geng Rashidah Chanel Hardwick Joseph Parker Huntemann Sohmer Raphaele Mascia Erica Shante Pigott Violetta Ravagnoli Lisa Mathieu Warshaw

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Paul Spencer Amsbary
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William Charles Hankinson
Manu Kapoor
Angelique Julie Lausier
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Susan Star Aaron Leslie Steven Leighton Alexandra Lee Pajak Master of Science in Public Policy

Avonne S. Bell
Pablo Catalan
Sharon Ann Chandler
Lokendra Pratap Singh Chauhan
Chinawut Chinaprayoon
Heather McCausland Honerkamp
Erin Elisabeth Lamos
Nooshin Mahalia
Jason Anthony Randall
Olga Halina Sosinska
Edward Charles Weber

Master of Industrial Design

Edo Leon Eussen Alejandra Garcia-Castro Doria Joan Kung

Master of Science in Building Construction and Facility Management

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William Scott Henwood Jr.
David Harold Horton II
Gloria Dahee Kim
John Allen Kitchin
Lewis Robert McClain II
Ruth Alcira Milian
Robert Charles O'Connor
Victor Louis Roth
Bryan James Walrath
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Master of Architecture

Shauna Koepke Achey Iason Brandon Andersen Kenneth Allan Babinchak Robert Breckenridge Baird Franklin David Brewer Robert Clay Cameron Brad Iamison Colley Cynthia Lorraine Combee Phuc Hong Dang Anthony Jason Dooley Andrew Gregory Dybalski Constanze Kyoko Eckstein Iames Charles Elder III Stephen A. Fintak Ianae Maegan Futrell Caren Miki Hirai Nichole Ginger Holt Ioseph R. Jamgochian Erin Elizabeth Lindley C. Jason Mabry

Erin Nicole Moseley
James Garner O'Kelley
Lorraine Grace Go Ong
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Wendi Blake Rahm
Graceline C. Regala
Falynn Renee Schmidt
Chad Mitchell Stacy
Jihan Patrice Stanford
Andres David Stell
Nathan Charles Stone
Travis Lee Thatcher
Amine Mohammed Touati

Master of City and Regional Planning

Kristofor E. Anderson I. I. Cerere Iason Edward Chernock Susan Leah Cohn Marc R. Dixon Andrea Nicole Foard William Christian Gable Ben Woodrow Giles Miguel Granier Jennifer Avis Harper Kenwin Maurice Hayes James Richard Henson Jr. Xandon Xaviree Keating Hae Seon Lee Steven M. Lewandowski Rick Liu Nathan Mai-Lombardo Jennifer Indech Nelson Jeffrey Scott Owen Iason S. Perlmutter David Andrew Pierce Derek Robert Scott Ryan L. Sherriff Samantha Rosemary Singer Ashley Brittain Skinner Jonathan E. Tuley Matthew J. Vivian

Master of Science in Management of Technology Darrell Timothy Black Bryan Morel Grant IV Babatunde Olusegun Ogundipe



#### Master of Business Administration

Andrew Jordan Ackel Kokil Agarwal Megan Yvonne Baker Ludvic Baquie Meredith Marie Baum Bimal B. Bivek Ernesto Luis Bombalier Scott Edward Bouchette Osman Burak Burc Blakemore Douglas Campbell Kenneth Walter Chastain III Eric Cho Anjali Vinod Chudgar Kathryn Cranston-Morrison Devang Dhaka Ramon E. Cortes Dominguez Aaron Dube Anurag Dugar Ashley Lange Edmonson Akintunde Ayodeji Ehindero Adam Michael Feldman Matthias Fleckenstein Shannon Michelle Foltz Crystal Marie Gilpin Mark Allen Gram David Mark Grayson Esma Burcu Zaimoglu Guldiken James Michael Hambrick Jr. Alexander Montgomery Heublein I. Brad Hooker James Christopher Jayko Chris H. Iones Richard Jaudon Jucks Ismail Hakki Kasimoglu Patrick E. Kelsey Fawad A. Khan Douglas Dwight King Shruti Lamba Steven J. Logan Stefan T. Lupo David Satterfield Madden Ieffrey Loren Marx Katie Scott McGraw Michelle Elizabeth McGuire Eli Mckenzie III Leila Rose Meghji Cristina Casanova Might Michael Scott Mulford Pelham David Norville Eniola O. Okeowo Cristian E. Orihuela George Musungu Oruoch Neha Rastogi Evan M. Ruff Benay Sager Nicholas Edward Sarkisian William J. Sommer

Ryan Wayne Swanson
Ping Yee Tan
Elizabeth Cook Thomson
Jameson Ryan Triplett
David A. Williamson
Shidong Zheng

### Master of Science in Prosthetics and Orthotics

Andrew Robert Allison
Walter Lee Childers
Andrew Michael Curran
Tiffany Danielle Forest
Catherine Leigh Pipkin
Ronald Alan Roiz
Lara Lukins Schrock
Yi-Ying Tsai
Sean Richard Zeller

#### Master of Science in Earth and Atmospheric Sciences

Vincent Emmanuel Combes Jay Andrew Jackson Stephen Adam Rieck

#### Master of Science in Psychology

Christopher Marcus Crew
Elsa Eiriksdottir
Matthew R. Hilimire
Min Young Kim
Keith Leonard Main
Erin Taylore McDole
Brian McMahon
Michael Adam Nees

### Master of Science in Biology

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Burcu Bakir Cristina Prolla da Silva Adam Charles Leon Jason Joseph Pedone Ishwardeep Singh

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#### Master of Science in Physics

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#### Master of Science in Chemistry

Amidat Omobolanle Acklin Bradley Edward Carson Hilda Sujeiri Castillo Michael Douglas Chambers Benison Forchi Forfeke Jeremy Charles Granger Mary Nell Higley Richard Stockton Jones Alex P. Jonke Daniel Joseph Menasha Kristin Breanne Wittich Guseul Yun

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#### Master of Science in Medical Physics

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#### Master of Science in Health Physics Candi L. Schaub

Master of Science in Health Systems Alexis K. G. Wismer

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Charles Becht V Ryan Daniel Bechtel Jose Ignacio Marquez Damian Jeanne Ann Dion Steven Paul Hamilton Lander Ibarra

### Master of Science in Operations Research

Kathryn Summer Clark Joo-Young Kim Jakkapan Luangnarumitchai Jon David Petersen Monika Katarzyna Szymczak Nguyen Le Truong Emrah Uyar Mingzhan Wu

#### Master of Science in Industrial Engineering

Paul Etienne Berman Paul William Dalton Tobias Felix Gefaeller Ahmed Hentati Kusha Kamarei Tarun Keswani Sungil Kim Daniel Krampe Marc Francis Maier Philipp Meidl Hashai Vijay Papneja Ioshua Wasawit Pas Abhijeet H. Patel Claas Felix Pinkenburg Mehmet Gokhan Samur Iill A. Treanor Iie Zhu

#### Master of Science in Aerospace Engineering

Efstathios Bakolas
Elise Karen Beisecker
David Julian Benavente-Sanchez
John Allen Christian III
Nicholas Juan Coronado
Gregory Florent Dubos
Kathryn Elizabeth Goben
Peter Bartholemew Hart
Tanner Joe Holloway
Michael Christopher Hoye
Erik Marshall Kabo
Mathieu Davouth Leng
Charles Eric Lynch
Jonathan Rodgers Murphy
Mehul Pravin Patel

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Alessandro Spadoni
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Christianna Elizabeth Taylor
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Grant Wells

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George Pierre Dumunt Jr.
William H. Hartley
Joseph Lloyd Konecny
Andrew Scott Mudd
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Abigail FriederikeJoyce Pynn
James Christian Samp
Graham Thorsteinson
Rebecca Maria Ugalde

#### Master of Science in Environmental Engineering

Lauren Elizabeth Handell
Diane Jean Ivy
Sinem Gokgoz Kilic
Scott David Levesque
Miranda Jeanne Lowe
Pranay Prakash Mane
Yu Miyashita
Nivedhya Srambickal Ramaswamy
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William Christopher Boehle
Timothy George Brandstetter
Christian Vaughn Braneon
Anna Buseman-Williams
Mustafa Kemal Cambazoglu
Nicholas Joseph Crispell
Nicolas David Gershanik
Jonathan Eric Green
Endam Gungor
Ana Maria Hagan
William Pace Haynes Jr.
Peter Michael Jenior
Patrick James Kelly

Soonchul Kwon Ryan Andres Lezcano Navid Nekouee Cagri Ozgur Jan Michael Scott Jr. Nalan Senol B. J. St. John Brett Daniel Vogt

Alper Akanser

### Master of Science in Electrical and Computer Engineering

Mohamed-Amine Alami-Fettouhi Christopher Brian Alberti Nevin Altunyurt Arnaud Lucres Amadjikpe Michel Apostolou Erman Ayday Jean-Christophe Yves Vincent Berge Leif Erik Berntsson Florence Bonnafe Amol Anil Borkar Renaud Iulian Boutet Philip Michael Brady Nicholas George Miles Brown Albert Ioon-Soo Byun Yann Sebastien Chatelain Eric Cho Dwifuzi Coe Daniel Adam Cook Tegan William Counts Maxime Crepin Anne Czwartkowskyi Quoc-Dan Dang Christopher Day Thomas Deslandres Enguerran Daniel Godefroy Despis Thong Minh Doan Hadrien Jean Andre Dollfus Ierome Duhamel Akintunde Ehindero Rim El Moutawakil El Alami Kevin Daon Fairbanks Yu Feng Jeremy Damien Froger Sthithaprajna Garapaty Jean-Philippe Gerald Seema Rani Ghosh Rachel Tawanna Harris Haude Hermand Paul Hominal Kyle Evan Howells Christophe Huguet Vineet Iain Justin V. John Ashley Nzinga Johnson Neil C. Joshi Sujay Suresh Joshi Seungwoo Jung

Balaji Kamakoti Gedeon T. Kamga David Alan Keeling Eric Pascal Djakam Kengni Chong Kang Kim Young Geul Kim Calvin Richard King Jr. Thiebaut Klein Jerome Fabrice Lafon Cody William Lamb Davis Lao Abraham Moris Lapscher Louis Launoy Vincent Guillaume Le Pape Matthew Richard LeBlanc You-Yu Lee Sylvain Pierre Thibault Lemercier Dean Leon Lewis Xiao Liu Christopher Phan Luu Elizabeth Anna Whitaker Lynch Stephane Benoit Maraficaud Gregory Jean Mathador Brian McGarvey Vichai Meemongkolkiat Renaud Menard Omar Mustafa Ibrahima Jacques Ndiour Vu Duy Nguyen Christopher Dean Olinde Ananta Raj Pandey Noman A. Paracha Nihar S. Patel Ibrahim Ethem Pekkucuksen Ryan Jesse Pirkl Anirudh Prasad Piotr Waclaw Prokop Ioel Thomas Prothro Farid Rahba Jacob M. Rasco Amanda Louise Richards Sundeep Roy Olivier Remi Marie Salomon Adam Michael Schlesinger Adrian Ricky Jude Sequeira Shyam S. Seshadri Larry Don Smith Ir. Kartik Sivaram Sundareswaran George Wallace Tennille III Christos Theodoridis Elise Thoma Ethan Brantley Trewhitt Michael Rene Guy Vachette Jean-Philippe Bernard Villareal Justin Patrick Vogt Dane Patrick Wagner Matthew Corbin Wiggins Cody Blair Wortham William Weijia Yang Angelique Su Man Yeung

Master of Science in Mechanical Engineering Theodore Earl Anderson Paul T. Avezzie Charles Bayne Aycock David Lawrence Bark Ir. Robert Wetherill Bialobrzeski Ludovic Nicolas Burton Danny Lee Carpenter Toufik Yacine Chalfi Mati C. Chessin Andrew Edward Clarke William Michael Clearman Charles Lee Coggins David Michael Cook Patrick Brian Cox Michael Apostoli Damianakis Ouentin Rene Daniel David John Dewees Carter Reynolds Dietz Zachary Welch Douglas Ritchie D. Dow Stephanie Pohl Eddy Marcus Todd Eliason Daniel Jason Erno Ali Essadaoui Iames Davis Garth Fabian Thomas Goericke Joshua David Gsell Rani Harb Timothy Yuan-Ting Hsu Gautam Rajnikant Jadhav Mohammad Kamran Jeelani Byron Edward Johns Gilles Joubert Colin F. Kelemen Rye James Kennedy Kathryn Rae Kiernan Stephen Andrew Latham Andrew Cook Layton Patrick Alain Louka Jun Frank Ma Jennifer L. Martindale Aaron John Mashue Ryan Mitchell Melsert Andrew William Menges Douglas John Merrell Azeem Meruani Alexander Page Michaud Christopher Michael Morency Hannah Wynn Muchnick Brian Andrew Nealis Thang Van Nguyen Jean-Marc Pages Raymond Pang Bradley Alan Parti Nicholas Daniel Paulish Benjamin Plouvier Alexey Podust Duncan Spalding Pratt

David Griffin Reid Iessica Lynn Remmert Edison Alfonso Rincon Nicolas Roussel Kevin John Lewis Roy Adam David Seiple Anandraj Sengupta Robert Paul Stachow Ir. Keith David Suda-Cederquist Sungmin Suh Joseph D. Sweeney Amos Ching Tam Stephanie Campbell Thompson Nicolas Thouault Iuan Pablo Toledo Byron E. Van Gorp Aish Varadhan Rohit Vardhan Walter Stanley Walczak Brett James Warta Bo-Siou Wei Renee Solomon Wenstrup Adam Niehaus Whelan Douglas Adam Whitcher William Benjamin White Steven William Wilbur Adam Mark Will Freddie Thomas Wilson Ir. Iack Raul Zausner

# Bachelor's Degree Recipients

### College of Computing

Bachelor of Science in Computer Science

**Highest Honor** Benjamin Judson Bachman Hai Thai Dang Mark Anthony Jose DeJesus Daniel Theodore Engel Joseph Howard Irwin Daniel Ryan King Kelly L. Lehman Lee Thomas Martie Justin Michael Mitchell Bradford Elliott Robertson Nathan Robert Rose Laura Elizabeth Rouse David Leo Schachter Thomas Albert Shanks III Manabu Shimobe Colin David Smith Shreyas Srinivas Sarah Elizabeth Tursell Kevin Christopher Webb Brian Charles Williams

High Honor Stephen C. Ake Brantly Mercer Callaway Benjamin J. Chambers Trung Quy Lai Gary Christopher Mann John Steven Nickerson Ishita Patel Brandyn J. Roemer

Samuel John Young

Honor

Jose Manuel Caban Lee Anthony Crippen Sangwoo Kim Chansereyratana Lim Puyan Lotfi Anita Lugonja John David Shirley II Matthew Ryan Ward

Eric Alan Scukanec

Mostafa Medhat Alattar Asim Ali Jon E. Beckham Michael Timothy Bleigh Shakti Chauhan Jeremy A. Ciccone Mina Doroudi Ilya Dovidovskii Jeremy L. Duvall David Harrison Eakes Jimmy Mauricio Espana Michael David Federici David Wise Figlar Douglas Keith Fraser R. Steven French William Joseph Helfrich Jr. Brian James Henke Evan Price Hodgson Ioshua Allen Holt Todd Brackett Hudgens Muhammad Ahsan Hussain Ionathan Alan Kean Yevgeny Alexandrovich Keyser Christopher Warren Kramer Oh Kil Kwon Jon-David Langeland Daniel Michael LaRoche Joung-Goo Lee Matthew Lee Kenneth Iain MacLeish Matthew Robert Manzel Jonathan Thomas McAbee-Reher Kerry Scott McLeod Jereme Paul Mills Shilpa Rao Nemani Tyler Randolph Overman Shovaen Bhasker Patel Nicholas Charles Ralabate Nirav Sailesh Shah Seema Sharan Kyle Lee Spafford Kaori Takeuchi Peter Michael Vulgaris Matthew Kurt Weber Ieffrey Kent Wei James William Wert III Christopher Alan Whalen Matthew Charles Ellis Wood

Bachelor of Science in Computer Science Cooperative Plan

Highest Honor Sebastian Becerra-Licha Troy David Brant

Troy David Brant Denis Luis Bueno Joanna Marie Leidy David Edwards Mann Christopher Ryan Ronderos Omar Mostafa Zakaria **High Honor** 

Brian Joseph Davidson Asif Heerji Matthew David Kurjanowicz William Stuart Lee Matthew Isaac Worley

Honor

Kane Duran Bonnette

Jacob M. Bolton Phuc Hong Dao Mohammad Saiful Islam Michael John Strobel

Bachelor of Science in Computational Media

**Highest Honor**Devin Grey Hunt

**High Honor** Colman Thomas Bryant

Honor

Nicholas Lawrence Bowman John Vincent Kelly III Kurt H. Margenau Justin Lanier Smith

Patrick Bonaparte Laura Beth Bungenstock Travis Roger Whilden

Ivan Allen College of Liberal Arts

Bachelor of Science in Public Policy

Highest Honor Amanda Dyann Dugan Taylor Scott Narewski Stephen Michael Utych

**High Honor** Christopher Gregory Eells Matthew Charles Johnson Whitney Renee Vail

Sharyn Nicole Finney Le'Quetia Sharesse Jackson

#### Bachelor of Science in History, Technology, and Society

**Highest Honor** Kristin Ashley Noell

#### Honor

Jennifer Ann Rogers

William Collin Box Katherine Elisabeth Colmer Maria Anne Forline Carson Burgess Parker James Matthew Stephenson Kristen E. Tocher

#### Bachelor of Science in Science, Technology, and Culture

**High Honor**Kristina Kaye Hull
Amanda Jean Korell
Johnathon Wayne McFarland

Warren Hilton Harper Jr. Jaron Ridgeway Hendrix Joel Scott Linderman Jason Nicholas Thurman Christopher Charles Van Acker Jewel Sheron Welch

#### Bachelor of Science in International Affairs and Modern Language

Highest Honor
Emily Nicole Clifton
Caitlin Marie Crist
Albert Max d'Heurle
Jonathan David Griffin
Christopher Nolan Lynch
Michelle Kathleen Moon

High Honor Olivia Clare Hayes Courtney Jennifer Leech Eric Thomas Vogel

#### Honor

Sterling Royce Wilhelm Gerdes Christine Cory Vaughn

Leah Elizabeth Heim Sanjana Susan Mammen Leigh Nicole Sprowls Bachelor of Science in International Affairs and Modern Language Cooperative Plan

**Highest Honor** *Rizwan R. Ladha* 

#### Bachelor of Science in International Affairs

Highest Honor Brent Tyler Baxley Thomas David Earnest Jessie Kathleen Edwards Divya Kalb Kelly Elizabeth McCall

**High Honor**Christopher Bret Garrigues
Brice Dillard Painter
John Douglas Waters Jr.
Srinivasu Yerneni

#### Honor

Sarah Elizabeth Ford Summar Shoaib Lindsey Lauchlin Thompson Sarah Kathryn Wood

Amanda Kay Brown Elizabeth Ann Burchfield Peter David Busse John Ernest Ceisel Victoria Anne Cherry Melissa Claire Dibben Nicholas Garth Hutchings Mary Helen Knight Blair Sterling Metz II Ann Elizabeth Moormann Meena Maria Nabavi Michael Bradford New Laila Rifay Daniel Taylor Rubenfield Brian Devin Searcy Brittaney Lee Short Allison Nicole Schemm Smith Jacob Aaron Tucker Saudamini Amul Zarapkar

#### Bachelor of Science in Economics and International Affairs

**Honor** Sung Woo Choi

Aaron William Nowak

Bachelor of Science in Global Economics and Modern Languages

**Honor** *Tiffany Michelle Schoenhoff* 

Bachelor of Science in Economics

Highest Honor Gregory Carl Leo Davis William Roberson Ryan Matthew Schofield Kyle Eugene Thomason Mark Yuan

**High Honor** Scott Pease Jarrell John Monti Kapteyn

Mindy Michelle McCaughey Lawrence A. O'Donnell Jacob Lopaka Smith Brandon A. Sprowls

## College of Architecture

#### **Bachelor of Science**

Highest Honor
Thomas Beattie Boyd
Kenneth Alan Cherney III
Erin B. Connolly
Kelly Morgan Hegarty
David Joseph Krogh
Justin Andrew Schwartzhoff
Nicole Elizabeth Seekely
Amanda Kaye Slaughter
Katherine L. Tans
Evan Vance Watts
Stephen Anthony Weitzel

High Honor
Bryan Thom Alcorn
Rachel Ann Cobb
Lindsey Christine Graham
Amelia Catherine Halter
Kiem Hoan Ho
Paul L. Knight
Flora Lee
Laurel Naomi Marshall
Bryce David McQueen
Lauren Coleen Mitchell
Phi Tran

#### Honor

Ira Jacob Dennis
Christopher Andrew Geist
Daniel J. Goers
Jong- Jin Lee
Susan Elizabeth Prater
James George Roussos
Geoffrey Keith Sosebee
Lindsey Elaine Waters

Jennifer Ann Allen Melissa Anne Beachy Craig Stuart Bullock Wei Kuo Cheng Lyndsey Nichole Deaton Payal G. Desai Robert Latham Diamond Clayton Wesley Holmes Felix Hu Joshua Styles Hunt Jessica Suzanne Jackson Nadine Asem Kashlan Helen Kim Christopher Alan Kupcho Charles Andrew Lindberg Jessica Lee Lord Constantin Luchian Robert Randall Morris William Joshua Oakley Julia Ashley Praser James Matthew Stephenson Melissa Magill Thackery Jessica Rae Wallace Shauntay Ariel Word Kan Zheng

## Bachelor of Science in Building Construction

Highest Honor Michael Robert Peter Delashmit Brett Andrew Haynie Kari Lynn Miller Todd Lawrence Trappe

High Honor
Dong Bom Kim
Feng Xue

#### Honor

Sara Ellen Cagwin Jordan Peter Dombart Steven Jeffrey Dunlop Ian Paul Mueller Rebecca Anne O'Donnell Heidi Lee Schlansker Joanna Lee Tatum Nicole Vanessa Bennett Adam Wayne Bounds Luther Darby Bryant Benjamin David Christoff Ryan Andrew Clear Adam Benedic de Silva Nathan Mark Green Ashley Anne Harrison Mitchell Dennis Kaas David Vance Melton Kevin Robert Moore Stephanie Michelle Nelson

#### Bachelor of Science in Building Construction Cooperative Plan

**Highest Honor** *Brandon James Wilt* 

**High Honor** *Perry Jeffrey Gibbs* 

## Bachelor of Science in Industrial Design

Highest Honor
Alfredo Gonzalo Aponte
Kira Lyn Barcus
Mary Allison Brennan
Meredith Megan Harman
Jana Brinker Heiss
Adeel Tahir Ismaili
David James Kessler
Andres Javier Oyaga Loewy
Stephanie Jo Radbill
Sara Michelle Tison
Jessica Jean Wood

High Honor Mark Alan Parsons Emma Elizabeth Sugg Brandon Donald Swafford Amanda Gaines Whitley

#### Honor

Jesse Ray Chen
Jessica Ruth Cole
Sergio E. Gill
David Thomas Gransewicz
Melissa Fung Hwang
Laura Megan Janet
Valerie Marie Jencks
Tuyet Hong Thi Nguyen

Kareem Victor Elias Bendeck Jason William Bishop John Douglas Chin Sergio Salvador Estrada Jesse Altmeyer Gooley Nicholas Robert Milevsky Alexander Claudius Petersen David Charles Tucker Catherine Billiris Zachas

#### Bachelor of Science in Industrial Design Cooperative Plan

Catherine Marie Schindel

### College of Management

### Bachelor of Science in Management

**Highest Honor** Michael Ryan Casner Molly Elizabeth Childers Wendy F. Chu Iohn Destin Dunham Scott Douglas Durham Kathryn Elene Griffin Melissa Gail Hayes Baillie Elizabeth Homire Ashley Elizabeth Johnson Ryan Patrick Langdale Jason Wyatt Nelson Patrick Seavers O'Neill Lauren Ashley Patton Lauren Dominique Raymond Darryl L. Richard II Matthew Brendon Ritz Ioshua Adam Smith Alison E. Walker Brian Alan Wright Jeffrey Martin Young

High Honor
Barbara Michelle Daymude
Molly Amanda Lang
Jessica Michelle Lloyd
Brett Donald Miller
Charisse Janel Miller
Rachael Karr Nylin
Aastha Sharma
Alison Jo Roseann Silverio
Rachel Anne Streams
Deborah Anne Wilhoite
Braden Alexander Willis
Katherine Elizabeth
Wrobleski

#### Honor

Casey Michael Arundel Nicole Renee' Bradford Daniel George Crews Wells Brabham Curlee Anna Catherine Cutts Ienny O'Neal Freeman Lauren Elizabeth Haburchak Huma Majid Hosain Kevin Burt Larsen Ashley Bethmara Leen Katherine Joan Malone Craig Allen Neal Christopher Schmitt Philbeck Joe Matthew Queen Christopher Evan Reis Amy Ellen Sachsenmaier Christina DeAnn Sedor Abby Lynn Showers Benjamin Michael Songer Deborah Elizabeth Stephens Yuka Takahashi Alexandra Nicole Thomas Michael Adam Vincent Farral Yifan Wang

Stephen Thomas Abernathy David Stanley Andersen Melissa Bates Atherton Brett Randal Barker Elizabeth Leona Bartle Viacheslav Igorevich Batyrev Wesley Francis Bear Daniel Berende Reuben Richard Rene Victor Fuller Bidez Kristy Marie Blackman Iason William Blake Jimena Bravo Buitrago Elizabeth Ann Burchfield Iohnathan Michael Burrows Paul Matthew Byrne III Adam Lee Caskey Grayson Edward Cason Hyun Woo Chang Michael Thomas Clarke Kevin Ryan Clickner Katie Anne Coggin Rebecca Cole Kenneth G. Cook III Luan Kinh Dang Kreta Piyush Desai Jennifer Elise Drake Philip James Dreger IV Gerald Ryan Duckworth Carrie Beth Cooper Dunbar Frank Vincent Edwards David William Elsberry Ajenavi Christopher Eziemefe Mary Kate Ficke

Sharyn Nicole Finney April Dawn Forshee John King Fountain Anthony Scott Fruscione *Ieffrey Scott Gallaher* Troy Andrew Gerstenberger Patrick James Ghosh Ioshua Travis Goff Gregory Charles Goodson Paige Lindsay Guy Ioseph Iohn Hammond Andrew Mark Hawranick David Scott Hendley Stephanie Denise Higgs Bradford Abbott Hildreth Jonathan Cook Hollingsworth Kelly Renee Humphrey Brandon Lee Jeffcoat Matthew Iones David Nicholas Iordan Adam Matthew Katz James Ryan Keck Travis Grant Kelly Michael Edward Kennair Brian Y. Kim Emily Brooke Knight Cassandra Rae Knowles Avid June Lajevardi Cynthia Aubrie Lee Kimm Elizabeth Lincoln Pradeep Gopala Mangalapalli Ioshua Moore Mathis Mark Shawn McCabe Khristina M. McClinic Sanders McCown Jameson Wolf McKible Ashley Whittington McMahan Zeshan A. Merani Ashley Jeannine Mills Joseph Lee Mingledorff Iesse Tyler Misel Richard Alexander Mitchell Samuel David Morgan David Koji Oguni Esther Sun Oh Katherine Anne Oliver Kai Ouyang Michael A. Pearce Nicole Marie Porcheddu Meredith Blaire Powers Zachary Michael Rath Evan Christian Rimmel Graham Pryor Roberts Joshua Seth Rosenfield Andrew Ross Scholtens David Edward Schutte Chandni Sheth Amanda Elizabeth Shook Brett Michael Sparling Abhisarika Srivastava

Lindsey Kimberly Stauss Derrick Lamond Steagall Rachel Edith Stern Ianell Helen Stewart Ii Yoon Suh Chad Fitzgerald Teat Erica Jackson Thorn Ben Tignor Andrew Bryan Truett Ir. Sophia Adelaide Tsonis Niraj Vashi Nick Wagner Kyle Patrick Wallace Sarah Kate Watson Laura Allison Weathers Anna Kristen Wilson Christopher Julius Woods

Bachelor of Science in Management Cooperative Plan

Highest Honor Laura Nicole Stanley Casey Leigh Swails Shilpa Lalchand Tahiliani

**High Honor**Caroline Meagher Mahoney
Matthew Allen Swanburg

**Honor** Robert Jack Jay Graham

Brandon Christopher Bass Stephen Davis Cairns

College of Sciences

Bachelor of Science in Discrete Mathematics

Highest Honor Kevin Tyler Cross William Branson March Brian Koichi Nakamura Adam Jacob Tart Brian Charles Williams

Bachelor of Science in Earth and Atmospheric Sciences

**Highest Honor** *James Ian Belanger* 

High Honor

Alice Ann Koerner Hannah Ruth Stewart Anna Rachel Williams

Honor

Austen Michael Shantz

Christopher Henson Keiser Jeffrey Lee Nelson Nathan Wu

#### Bachelor of Science in Biology

**Highest Honor** 

David Young Balser
Joseph John Bear
Steven Eric Blackwood
Colin Douglas Booth
Tricia Sue Dudek
Alexander Joachim Engelmann
Katherine Clair Fluke
Cody Scott Freeman
Kristen Danielle Kennedy
Sarah Carmela Paglioni
Charles David Warden

**High Honor** 

Aaron Robert Bolduc Leah Anne Clark Meryl Christine Mims

#### Honor

Sarah Chen Justin Wade Fincher Shervin Hadizadeh David Joseph Herren Stephanie Lane Mitchell Vy Ha Nguyen

Melissa Ann Affatato Jaclyn Annette Arpin Stephanie Claire Chester Christina Louise Cunnington Maryam Doroudi Tung Thanh Duong Lee Franklin Echerd Sarah Elizabeth Gausman Megan Elizabeth Gosch Imran Amin Hasni Megan Kathleen Heaphy Joshua Brandon Heaton Jennifer Christine Holmes Alexis Reid Johnson Charles Pierce Lines Naghmeh Majdi Janna Murray Heather Noland

Biraj Kaushik Patel Jennifer Ann Rekau Melanie Ann Ringham Sareh Sabripour Meredith Noel Stasiak Nami Ueda Swati Murthy Vishnubhakat Menglu Wang

#### Bachelor of Science in Biology Cooperative Plan

Jose Alejandro Mundo III

Bachelor of Science in Applied Psychology

**Highest Honor** Ember D. Epperson Morgan Lyn Willard

High Honor

Alexandria Rae Brzenk Jessica Ashley Durham Denise Michelle Larkins Kristy Lynn Marquez Nikta Pirouz Meghan Teresa Quinlan

Honor

Monal Rajani

Christine Min Bae Shelly Elizabeth Bland A. Bozorg Katie Anne Coggin Anita Renee Culler Mary Amanda Harris Jennifer Christine Holmes Richard Tai Kuo Mireille Genevieve Murad June Young Park Iessica Erin Rooney Zunaira Salim Ashley Kristin Gardner Taylor Shumaila M. Virani Thomas Ayres Wangerman Elizabeth Lynn Weldon Sarah Lynn Whitlock

#### Bachelor of Science in Applied Mathematics

Highest Honor Alexander Jordan Block Darrell Steven Britt Jr. Darshan William Bryner Emanuel Gabriel Indrei Charles Zachary Martin George Alexander Steele IV Matthew Conrad Tanzy

High Honor

Michael Stanford Young

Honor

Elizabeth Cory Hart

Lisa Bennington Jena Chang Jeremy Lael Corbett Ryan Stevenson Field Sarah Amalie King Chandler McMichael Sommerville

#### Bachelor of Science in Applied Physics

**Highest Honor**Patrick James Decker
Alexander Joel Silverman

#### **Bachelor of Science in Physics**

**Highest Honor** 

Jerry Carr Jr. Robert M. Hovden Charles Zachary Martin Andrew J. Musser Matthew Conrad Tanzy

Honor

Yatis Kanu Dodia Matthew Israel Schuchard

William C. Diehl Clifford Scott Hibbs Philip P. Lin Joseph Brandon Nichols Nicole Lynn Robertson Eric Henry Tart Jeffrey Scott West

#### Bachelor of Science in Chemistry

Highest Honor

Benjamin Judson Bachman Ryan Allott Hayn Anja Lesaja



High Honor

George Zaoshi Pan Pratia Akshay Patel

Honor

Patrick Miles Chesley Amanda Katherine Cooper Rhoda Xinying Gao Ryan M. West

Tumothy Fletcher Anderson Joe William Chiles III Andrew Berton Conley Phillip David Fetter II Samuel Jameson Garvey Elizabeth-Ann Gould Ieffrey Michael Hart Lauren Elizabeth Hayden Todd Andrew Murphy John James Nevin Jessica Hyui-Su Park Linh Hoa Son Derek Benjamin Stuck Cathy Van Tran

## College of Engineering

Bachelor of Science in Biomedical Engineering

Highest Honor

Ramsey Ayman Al-Hakim Laura Rose Croft Shobhika Dhingra Angela Renee Gill Iosh Adams Hammel Swati V. Kannan Royal Kai Yee Law Khin Khin Lay Ross Alexander Marklein Ryan Davis Moore Ravi Hemant Parikh Jason Eugene Rockhold Marc Edward Seaman Vijayalakshmi Sundaram Hari M. Trivedi Haining Yu

High Honor

Arash Astanehasl Subina Banerjee Robert John Beaulieu Jon-Michael Etienne Caldwell Rashi Chandra Mitchell James Donner Modupe Olayinka Billie Edogun Ionathan Faulk Greene Scott Pease Jarrell

Andrea Nicole Para Vijal Patel Benjamin Thomas Roller Steven John Ryan Hyojin Song Subina Surendran Srinivasu Yerneni Yu Zhang

Honor

Shannon Pari Fatehi John Michael Kroger Austin Garey Nichols Chintan Chandrakant Patel Shreya Shukla Bao Ngoc Chau To Saujanya Vadoothker Lauren Louise Vernon Kriss Frances White Iohn Francis Wiles Jennifer Meo Houng Zeitang

Adjete Kokou Ameh Felix Kwesi Boachie Amy Marie Byrd Christopher Clarke Jennifer Lynn Craig Jerett Scott Gordon John David Henderson Edwin Leary Kelly III Chun Yu Lam Sen Yuan Lin Matthew Ryan Palo Pietro Alexander Pariselli Norman Horace Ward III Samantha Sandra Willis

Bachelor of Science in Biomedical Engineering Cooperative Plan

**Highest Honor** 

Gayathri Balasubramanian Melissa Ilene Freedenberg

Bachelor of Science in Materials Science and Engineering

Highest Honor Stuwart Chen Stanley Casey Davis Ir. Nathan Anders Johansen David Joseph Lorang David Lee Safranski Gregg Thomas Van Laningham High Honor Jeffrey Charles Jasmin Arsalan Khalid Siddigi

Honor

John Berry Guthrie Kimani T. Partin Laurissa Alia Prystaj Iohn Allan Shupe

Daniel Book Fuhrman Randy Scott Lampert Ross C. Mackowski Theresa B. Mara Danny Vu Nguyen Kyle Scott Wilkinson

Bachelor of Science in Materials Science and Engineering Cooperative Plan

High Honor Zachary Gray Segraves

James Borden Caverlee Jr.

Bachelor of Science in **Computer Engineering** Regional Engineering Program

High Honor William Alfred Bowers III Eric Skaar Tadsen

Steven Alexander Vaughn

Bachelor of Science in Computer Engineering

Highest Honor Joshua Alexander Beavers Kevin Tuler Cross Ricardo David Acio Del Rosario Timothy John Fabiniak Minh B. Nguyen Prateek Shah Jeffrey Alan Swofford Alvin D. Yates

High Honor Jordan Taylor Wills Ioshua Kevin Wilson

#### Honor

Rohan Bansal Jessica Ann Frame Jay Allan Mair Peter Henry Waszkowski

Joseph M. Antoon Timothy Earl Barnes Mikhail Burshteyn Rickey Lenell Fergerson Patrick Timothy Hamilton Tae Wook Kim Matthew Kuo Loc Quang Le Alan Neil Nix John Ben Owens II Michael Joesph Sabot II Ryan Scott Thorsteinson Daniel Matthew Uhrman Richard Brandon Vaughan Reeves Paul Isaac Washington John Wallace Wyant

#### Bachelor of Science in Computer Engineering Cooperative Plan

**Highest Honor**Ronald Lee Henry III
Scott Forrest McCans
Brian Koichi Nakamura

**High Honor**Keil Sterling Brewer
Jeffrey Michael Darrish

David Franklin Hembree Rachel Anne Moorehead Drew Richard Petersen

## Bachelor of Science in Nuclear and Radiological Engineering

**Highest Honor** *Elisabeth Faye Gayton Bernard Lee Jones III Christopher Tyson Myers* 

**High Honor** *Emily Mae Colvin* 

Jessica Shawn Feener John-Patrick Floyd II Chad Michael Grennor Franklin William Hope Lee Paul Tschaepe

## Bachelor of Science in Industrial Engineering

Highest Honor Vivek Amin Lindsey Leigh Bogue

William Reid Bond Roberto Mario Castro Chengran Chai Joy Eudora Frazier

Xiaolu Guan Raghav Himatsingka Manik Jain

Reza Kasravi Michael James Kelly Vadim V. Lantukh

Chee Siang Lau John Xiang Li Kristie Ann Ludvigsen

Paul William Meggs Lauren Elizabeth Mills Aishwarya Narendran

Mary Winifred New Nicholas Vincent Petrus

Lucas Posada Ashleigh Anne Royalty Vaibhav Shah

Richard Olney Wright Mark Yuan

High Honor
Osman Hafeez Chaudhry Chaudhry
Farhad Chowdhury
Steven Keith Hardy
Si Li
Leslie Ann Myles
Miguel Alexander Rivera
Marissa Gale Saulsberry

#### Honor

Jeffrey Shek

Andrew Raymond Billings
Courtney C. Byrd
Kimberly Chen
Katherine Michelle Daniel
Irina Ilyashenko
Shitanshu Jhunjhunwalla
Hyuk Soo Kahng
Justin Junghwan Kim
Siddharth Lunawat
Kunal Harishbhai Patel
Kevin Anthony Smith
Kimberly Anne Toomer

Leslie Anne Babb Derrick Gerrard Barrett Adam Kenton Batenhorst Brett Walker Bell Rahul Rajesh Bhagnari Christopher L. Carter

Donna Cavaliere Fallon Nicole Coble Andrew Antonio Dasso Meghan Kathleen DeVinney Yen Thi Duong Anna Kiara Falcon Bodi Shawn Fan William Grier Ferguson Brian Christopher Fox Tyler Jaye Mckinley Gales Jenna Leigh Girardot Asit Narain Gupta Aaron Nels Haight Ryan Hunter Hogue Caroline Mia Ingco Mu-Ku Kang Meeta V. Kasan Seth Daniel King Andrew Eugene Knouse Robert Daniel Kuhn Beryen Lai Roger Bochiao Lai Travis Mitchell Lampert Justin Ross Lawrence Vincent LeFevre Audrey Alexis Lewis Brennan Scott MacKinlay Joshua Travis Mallett Jane Marie McKnight Ketan Mehta Megan Lea Merriman Richard Douglas Mock Mya LaTiffani Montgomery Joel Michael Morgenstern Iennifer M. Nichols Swathy Poorvisha Prithivi Divya Ann Purohit Neda Raji Gelareh Rezaeifard Brandon D. Richardson Ludia Lorraine Sherwin Sharon Shin Ionathan Iacob Stewart R. Christopher Sturdivant Amanda Leigh Sutton Carlos Benjamin Tan Jr. Neethu Thomas Iacob Norris Wilson Chadwick Thompson Wright Robert Emil Yocum

Bachelor of Science in Industrial Engineering Cooperative Plan

**Highest Honor** Kristine Lee Ashford Sarah Grace Awadalla **High Honor** 

Anna Lane Clark Blake Wilson Henderson David Edward Hubbard Blake Andrew West

#### Honor

Philip Jeffrey Safir Kathleen Elizabeth Tribble Matthew Gary Trinetti

Jennifer Ryan Griffin

Bachelor of Science in Aerospace Engineering

**Highest Honor** 

Burak Bagdatli Nicholas Sebastian Boechler Jeffrey Mark Bosworth Nathan Joel Christensen Christopher Emory Cordell Jr. Justin Samuel Gray Daniel Davison Hegeman Eric Scott Hendricks Alexander Nicholas Hreiz Brian Gregory Kazian Yuan Liu Fabian Keni Mak Vasudevan Manivannan Adam Charles Maser Evan James McClain Andrew S. Myers Gaurav M. Nagle Courtland Earl Pegan Ir. Balachandran Radharamanan Sheikh Kori Rahman Bradford Elliott Robertson Richard Alexander Scott Rajiv R. Shenoy Paul Elliott Specht Masayuki Yano

High Honor

Joshua Allen Terry Gray Charles Andrew Hardin Aaron Joseph Kelly Sean Garrett Paul Jeremy Royce Rutter Robert Christian Scott Robert Lee Taylor Jr. Esmond Teo Clayton Patrick Tino

#### Honor

Alexander Acierto Ainsmar Xavier Brown James Michael Cahill Sung Woo Choi Stephen Michael Gatto Satomi Kamiya Jarrod Andrew Pannell Thomas Richard Riney Jr. Jeffrey R. Staub

Jillian Apa David Barona Graham Austin Burdette Patrick Chai Yoonsuk Chang Iason Daniel Cormey Sarah Ruth Curet Ryan Stevenson Field Xin Fei Guo Rayiner Imtiaz Hashem Michael Jon Hatfield Jr. John Thomas Hoblack Alex Justin Hoffman Phillip Hom Robert James Hudak II Elise Marie Humbert Pierre Iimenez Roshawn Wendell Johnson Paul Austin Keith Robert Edward Kramer Brendan Joseph Kroll Charles Luther McCloud William Ryan McGehee Chiluwa Mdala Ryan Willson Merriam Christopher M. Neglia Andrew Carl Ollikainen John Taylor Oxford Ir. Matthew Vincent Panaro Hardik Dinesh Patel Bryan Samuel Powell Raghuram Boyapally Reddy Joel David Rosenberg Tushar Mayur Sampat Roosevelt Usoekong Samuel Ki Seok Song Daniel Raul Sotolongo Vesna Stojanovska Brennan Loyd Stults Mitsuyo Tsuda James Alan Turner

Bachelor of Science in Aerospace Engineering Cooperative Plan

**Highest Honor** 

Joshua John Bialkowski Robert Michael Brinley III Megan Elizabeth Englert Robert A. Haynes Christopher John Ignatius Jarret Marshall Lafleur Charity Joy Lewis Robert Roozbeh Maleki William Matthew Nipper Jason Yu

**High Honor** 

Matthew David Lord Thilini Prasadini Rangedera Nilesh Madhusudan Shah

#### Honor

Derek Matthew Cash Morgan Huanyan Goh Andrew James Heath Robert Louis Martin Camille D. Sauer

Kreta Piyush Desai John Robert Howard Brook Andrew Prudden Darren William Rettew Alan Shane Ward

Bachelor of Science in Chemical and Biomolecular Engineering

**Highest Honor** Lacey Katherine Adkins Andria Grace Davis Nicholas Michael Drahush Adam Jackson Kiefer Ashlee Catherine King Anja Lesaja Cornelia Moebes Jason Stuart Moore Oluwaseun Femi Ogunjumo Nimish Dinesh Pandya Shrayesh Naran Patel Matthew John Paul Alicia Diane Powers Obie Daniel Reynolds Carine Saha-Kuete Laura Isabel Nunez Salkeld

**High Honor** 

Gareth Ray Sheppard

Crystal Jing Zhang

Christopher Wayne Ethridge Kaylin Anne Harper Carrie Ann Kelley Purvi Rajendra Patel Michael Stephen Paul Jignesh Jagdish Shah Holly Claiborne Sheehan Prashant Vasudevan

#### Honor

Moubin Mahmound Al-Malla Crystal Jeannette Blickley Brett Adam Burris Richard Allen Giles Mallory Taylor Graves

Elizabeth Brass Almon Mark David Beverly Aditya Kumar Bohra Brandon Nicholas Cavallaro Stephen William Drylie Mayisha Iman Ealey Jignesh Haresh Fifadara William Denis Harper Nicole Kay Hess Samba Jarju Svjetlana Kuljanin Saleema S. Lakhani Kai Pong Lam Brett Hector Markwort Kyle David Martinez Mallarie DeShea McCune Guozhou Mo Brooke Anne Mullis Ivan Ordaz Tracie Leeanne Owens Layne Frances Perry Lan Diem Pham Nicholas J. Sherman William Michael Steiner Autumne Elizabeth Stuart Jennifer Leigh Turner Alecia Jonel Williams Kimberly Hand Williamson

#### Bachelor of Science in Chemical and Biomolecular Engineering Cooperative Plan

William Ryan Collins Aswathy H. Nair Michael Andrew Riddle

## Bachelor of Science in Polymer and Fiber Engineering

**Highest Honor** *Matthew Thomas Black* 

**High Honor**David Michael Berta Jr.

**Honor** Rolfe Bradley Johnson

Matthew Elliot Anderson Daniel Ryan DeNeve Robert Noyes Etheridge Phillip Aaron Groover Jee Hae Kim Alexander Richard Saputa Shulamite Dawn Wan

#### Bachelor of Science in Polymer and Fiber Engineering Cooperative Plan

#### Honor

Robert Wayne Brunken

James Morris Hawkins

Bachelor of Science in Civil Engineering Regional Engineering Program

Highest Honor Justin E. Hodges Tyler Lamar Price Pamela B. Trowbridge

**High Honor**Neil Patrick McKenzie
Kelli Danielle Tanner

#### Honor

Mehdi Jerez Bashirian Thomas Lee McCrary

Nathaniel Gary Barnett Nathaniel Oberlin Counts Jennifer Marie Marshall Adam Christopher Waites

### Bachelor of Science in Civil Engineering

#### **Highest Honor**

Daeyoun Bae
William Alexander Berry
Yi Wei Cheng
Robert David Moser
Jody Carter Peace
Rebecca Lynn Puetz
Kelley Bleu Sanford
Nicholas Andrew Schmidt
Menache Sofer
Amanda M. Thomas

**High Honor** Jeffrey Bryan Bernstein Jose Guadalope Castaneda Elizabeth Ashley Foster Varun N. Gandhi Patrick Anthony Gonzalez Ravi Gupta Joseph Craig Hensley II William Adam Logan Johnathon Wayne McFarland

#### Honor

Joshua Young Alexander Aaron William Bivins Daniel Patrick Cannon Jason Charles Goff Robert Jack Jay Graham Reed Edward Martin Cody Tillman Parham Matthew Stephen Roe Daniel Joseph Souther

Iuan Esteban Acosta Gregory Joseph Ashworth Anthony Frederick Bentivegna Cliff Douglas Bishop James Ryan Bullock Brian Mitchell Carley Kelly Amanda Cleveland Glynnis Cameron Conlin Justin Ryan Cooner Nathan Ross Cox Phillip Joesph Davis Melanie Iane Deal Hooman Doroudi Ruan Matthew Downs *Iustin David Drope* Samuel Calvin Durham Leo Andrew Holahan Ir. Ming-Pu Hsu Pervez Igbal Robert Preston Jacquette Jr. *Ieffrey Lance Kefalos* Michael Reed Keller Alexandra K. Kennedy Joseph Ridley Kinsey IV Peyton Jared Knowlton Emily Katherine Lantrip Christopher Lamar Lindsey Brandon Jay Linville Matthew David Madden Victor Hugo Martinez Jr. Michael Alan Morello Daniel Fredrik Olausen Angharad Chloe Emeline Pagnon Benjamin Joseph Pevarski Brian Christopher Potter John Andrew Rioux Dianna Aurora Rocheleau M. Jarrett Sappington John R. Schnick Charles Adam Shelton

Orit Tirana Sklar
James William Sloan
Benjamin Jeffery Smedsrud
Sean Thomas Smolarek
Kyle Taylor Snell
Eric Lloyd Spell
Aaron Keefer Stern
Alana Elizabeth Stuart
Chester Grant Thomas
Khanh Tran
Clayton Seth Whittingham
Ned Delaney Wright Jr.

#### Bachelor of Science in Civil Engineering Cooperative Plan

Highest Honor
Emily Michelle Nilsson
George Curtis Reynolds II

**High Honor** Tyler Davis Peek Franz Joseph Russler

Joseph Tyler Limbaugh III Kari Lea Weber

Jennifer G. Fields Allison Elizabeth Olean Robert Bennett Sumrell

Bachelor of Science in Electrical Engineering Regional Engineering Program

**Honor** Jenniffier Bieberbach

Richard Benjamin Dixon Russell Elijah Dowd Jarrod Dale Moore Robert Matthew Stone

Bachelor of Science in Electrical Engineering

Highest Honor
Arish Alreja
Shane Colleen Ardell
Daniel Ross Brostin
Ariel Corinne Brown
Punnaiah V. Chalasani
Brian David Chandler
Yew Ching Chen
Karan Chopra
Kevin James DeMarco

Matthew James DeVoe
Ofer Finkler
Michael Paul Galdos
Niranjan Ganesh Kumar
Christopher Theodore Garyet
Clarissa Ann Grayson
Girish Jain
Zen Anubhav Mehra
Bravishma Narayan
Amit P. Patel
Sujata Sen
Jerry Andrew Sorrells II
Dhruv Srivastava
Ian William Stephens

High Honor
Steven C. H. Dang
Armand Matthew DeFusco
Justin Deloach Dew
Phong Quoc Do
Joseph Karl Goldberg
Harsh Vardhan Gupta
Asad Hashim
Raghav Kohli
Siddharth Krishnan
Vivek Nath
Christopher James Smith
Anushree Verma
Ernest Ray Yang

Honor
Michael Algozer
Abhishek Venkata Bhagavatula
Arjun Krishna Bhatt
Kevin Andrew Brenner
Joshua James Connell
Nicholas Spyros Dermatas
Yatis Kanu Dodia
Jeffrey Thomas Hodges
Deborah M. Johnson
Kevin Shanker Sinha

Talha Saeed Ansari Andre Anthony Asbury Tayelolu Awoniyi Priyadarshini Bandaru Brian Patrick Binkley Garry Michael Butler Austin Clark Carpenter Riyadhul Kabir Chowdhury Joshua David Clayton Walter Cody Fincher Nathan Scott Fisher Vaishnavi Raghusarathy Gomadam Ramonn Forte Gullatt Aaron A. Hawkins Jonathan Vuong Hong Hsin Hsien Kuo Jonathan Barton Landham Matthew Hillman Lewis

Mangtin Bik Lian Matthew Stephen Logston Bryan Bao Luu Dilruba Malik Tuson Louis Marsh Lionel Howard Martin Ir. Trevor Anthony McLeod Pedro Alexander Medina Iames Andrew Michaels Robert Iustin Miller Zachary Louis Nelson Edwin Niculaescu Patrick Ryan O'Berry Uchenna Ralueke Obi Juan Carlos O'Connell Ndidi Bisola Ogbechie Frank Kwabena Oppong Shaunak Ramesh Patel Trung Hoang Pham Praduut Pokuri Iustin Alan Rand Iohn Alan Reese Jeong Hee Seo Ethan Nico Shaner Zhenhua Tang Basil Isidore Udoudoh Victor Marcelo Virreira Kifle Addis Weldesellase Marc Antony Wilson II Christopher Lee Woodard Kun Xu David Shumeng Yeah Craig Sanders Young

Bachelor of Science in Electrical Engineering Cooperative Plan

Highest Honor
Philip Nathaniel Brown
Kyle Bradley Campbell
Benjamin Patrick Clarke
Chetan Devchand
Chetesh Devchand
Kyle Bennett Hamilton
Ryan Patrick Hutchinson
Ankur Saxena

**High Honor** Siddharth Bhandari Michael G. Smith

Honor Kevin Judson Parker Kenneth Joseph Steeves Dustin Brantley Weeks Joseph Wesley York Stanley Israel Beasley
Jason Glenn Bellamy
Malachi Causey Bennett IV
Alex Dixon Berkobin
Matthew Thomas Crowley
Nicholas Anthony Ham
Juan Ramon Madrigal
Charles Alexander McFeaters
Ricardo Yoshio Nojima
Zachary Whitman-Allen

#### Bachelor of Science in Mechanical Engineering Regional Engineering Program

High Honor Jonathan Michael Bankston Alexander Michael Ruderman

Thomas Ashley Beal Steven F. Hess Robert Eugene Lafond Julian Brown Stevenson

#### Bachelor of Science in Mechanical Engineering

**Highest Honor** Amanda Elizabeth Bennett Eric R. Deutsch Sead Dzebo Alfred Lloyd Frith Ir. Daichi Fujioka Michael Brian Galvin Ioshua Mark Inouve Ryan Patrick Kane Kendra Doniele Kofler Boon Ching Lee Taeho Lee Owen Carlos McGarity Robert John McWilliams Jonathan Daniel Olander Dan Boon Sankar Jeffrey Steven Schlosser Joshua Tyler Strow Benjamin McCoy Taylor Carla Beatriz Uribe Damien Angelo Valenti

High Honor
Boris A. Bazan
Benjamin Stewart Beck
David William Brunone
Michael Roberts Hamilton
Curtis Laurence Johnson
Jeffrey James Kerr
Rohit Khosla

Clinton Gregory Warren

Jonathan Matthew Kolaski Anthony Joseph Pergola Zachary Black Sosebee Joseph Ronald Steele Darryl James Tomlinson Matthew Allen Tomme Ruoya Wang

#### Honor

Steven Michael Altomare Rohan Bansal Jose Manuel Caban Benjamin Adair Howard Prashanth Philip Irudayaraj Charles Nash Simons Brandon Henry Terrell Kelly Anne Tucker Troy Wesley Watson Andrew Holmes Whitaker Shawn Duane Wick Alexander Whitaker Williams Yuan-Chun Paul Wu

Abhishek Agarwal Iames Steven Alex Ionathan David Allen Michael Frederick Allen Marcus Arevalo Martin Laurent Arignon Olufunmilola Omobolaji Atilola John Paul Beckman Iohn Michael Behnken Matthew Robert Betts William Dean Billard II Moritz A. Boecker Eric Kenneth Branch Brooks Daniel Bryant Jacob Evan Burleson Stephen Michael Butler Sean William Cassidy Colin Clay Caviness Alan Sceborn Clark Samuel Joseph Daves Christopher James Delp Ian Dezen Carl Ehrnrooth Ionathan David Eveleth David Fernandes Robin Holbrook Fernandez Nathan Zachary Fulton Blaine Niland Gardner Gregory Scott Geihsler Chet Allen Gutwein David William Houston Iacob Thomas Iacob Victor Jaworski Yevgeniy Benjamin Karshenboym Eric Blakely Kelley

Andrew Kim Jason Min Kim Carolyn Marie Kleppin Kristine Amanda Kurtzeborn Philip Ioseph Linkous Lindsay Leigh Moore Kevin Matthew O'Grady Oluwaseun Olaniyi Oyeniran Jamerson Michael Parrott Brett Hobart Perryman Wittia P. Phlong Aditya Prabhakar Michael James Ragins Bradford Alan Range Brandon Christopher Reed Ionathan Preston Reeves Christian Ryan Retterer Lauren Kay Rhoades Ievawn Sebastian Roberts Ryan James Russell Brandon Wayne Grant Saadiq Kevin Matthew Scarborough Dustin J. Scholz Daniel Edgardo Acosta Seara Robert Adam Smith Jeannine Frances Snyder Scott David Spencer Iohn Ralph Stafford III Michelle Annette Stille Lee Paul Tschaepe Iohn Matthew Tuck Collin Douglas Wallace Xiaoxiao Wang David Andrew Ward Garrett Webb Albert Whiteside IV Ryan Alexander Willingham Patrick Kelly Wilson Brandon Michael Winterling Joseph Paul Yeatts Makoto Yuzawa

#### Bachelor of Science in Mechanical Engineering Cooperative Plan

Highest Honor
Jeffrey Daniel Bisch
Annemarie Marier Cardell
Michael Jay Ely
Raul G. Fernandez
Sanjeev Shyam Heda
Gregory Paul Mallegol
Lambros Timothy Samouris
Aaron Michael Emata Scott
Karen Lenz Warren
Christopher Roth Weir

**High Honor** 

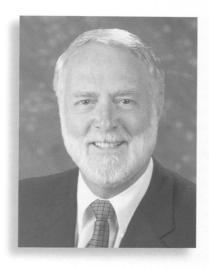
Drew Allen Glaser Kenneth Michael Helfrich Andrew John Mettler Caitlin Sarah Murphy Christine Lacey Primmer

#### Honor

Lisa Ann Bradway Robert Clarke Grant Edward Sun Kimn Chad Brandon Robbins Oscar Luis Vargas

Sean Thomas Amormino
Anthony Fields
James Michael Howell
Scott Philip Kerklo
David Lane Middleton
Christine Carol Montgomery
Andrew Martin Norcom
Charles Ray Popham Jr.
Elizabeth Ashley Wolf

# President G. Wayne Clough, PhD Georgia Institute of Fechnology \_



In September 1994, Dr. G. Wayne Clough became the tenth president of the Georgia Institute of Technology and the first alumnus to serve as president. Clough received his bachelor's and master's degrees in civil engineering from Georgia Tech in 1964 and 1965, respectively, and a PhD in civil engineering from the University of California, Berkeley, in 1969.

Formerly a faculty member at Duke University, Stanford University, Virginia Tech, and the University of Washington, Clough served as head of the Civil Engineering Department and dean of the College of Engineering at Virginia Tech, and as provost and vice president for Academic Affairs at the University of Washington.

During his tenure as president, Georgia Tech has served as the Olympic Village for the 1996 Centennial Games, research expenditures have doubled from \$212 million to \$445 million, the undergraduate experience has been strengthened and reshaped, and enrollment has increased from 13,000 to almost 18,000. More than \$1 billion in private gifts has been secured, and the statewide Georgia Tech Regional Engineering Program has been implemented. A \$1.2 billion building program has been completed, with another \$150 million in facilities in planning or under construction.

Clough has received nine national awards from the American Society of Civil Engineers, including the 2004 OPAL Award for Lifetime Achievement in Education. He is one of a handful of civil engineers to

have been twice awarded civil engineering's oldest recognition, the Norman Medal, in 1982 and in 1996. He received the George Westinghouse Award from the American Society of Engineering Education in 1986 for outstanding teaching and research. Elected to the National Academy of Engineering (NAE) in 1990, Clough was awarded the 2002 National Engineering Award by the American Association of Engineering Societies and in 2002 was named an honorary member of the American Society of Civil Engineers.

In 2001, President George W. Bush appointed Clough to the President's Council of Advisors on Science and Technology, and he currently chairs a nanotechnology task force and previously chaired the Federal Research and Development panel. Bush also nominated him to the National Science Board in 2004, and he is the only person to serve simultaneously on both of these national advisory bodies. Clough is vice chairman of the U.S. Council on Competitiveness and co-chaired the Council's 2004 National Innovation Initiative. He also chairs the Defense Department's Committee on New Orleans Regional Hurricane Protection Projects, and recently chaired the Engineer of 2020 initiative of the National Academy of Engineering. He serves as a special consultant to the San Francisco Bay Area Rapid Transit System for ongoing major seismic retrofit operations, and is on the International Advisory Board of King Fahd University of Petroleum & Minerals.

Closer to home, Clough is a member of the Executive Committee of the Metro Atlanta Chamber of Commerce and a trustee of the Georgia Research Alliance. He serves on the Board of Advisors for Noro-Moseley Partners, the Southeast's largest venture capital fund, and the board of TSYS of Columbus, Georgia. For eleven years, *Georgia Trend* magazine has listed him among the 100 Most Influential People in Georgia.

Clough's interests include technology and higher education policy, economic development, diversity in higher education, and technology in a global setting. His academic specialty is geotechnical and earthquake engineering, and he has published more than 130 papers and reports and 6 book chapters.

# 9hD Commencement Speaker Raymond L. Orbach, 9hD\_



Raymond Lee Orbach was sworn in by Secretary Samuel W. Bodman as the Department of Energy's first undersecretary for science last June. The new position was created by the Energy Policy Act of 2005.

As undersecretary for science, Orbach serves as the secretary's advisor on science policy as well as on the scientific aspects of all that the Department of Energy (DOE) does, from basic research, to nuclear energy, to the environmental clean-up of Cold War legacy sites, to defense programs. Orbach is responsible for planning, coordinating, and overseeing the Department's research and development programs and its seventeen national laboratories, as well as its scientific and engineering education activities.

In addition, Bodman has tasked Orbach with overseeing the Department's implementation of the President's American Competitiveness Initiative, which will help drive continued U.S. economic growth.

Orbach continues to serve as the director of DOE's Office of Science, a position he has held since 2002. In this capacity, he manages the third-largest federal sponsor of basic research in the United States, the primary supporter of the physical sciences in the nation, and one of the premier science organizations in the world. The Office of Science's 2006 budget of \$3.6 billion funds programs in high energy and nuclear physics, basic energy sciences, magnetic fusion energy, biological and environmental research, and computational science. Formerly the Office of Energy

Research, the Office of Science also provides management oversight of ten DOE non-weapons laboratories, supports researchers at more than 300 colleges and universities nationwide, and builds and operates the world's finest suite of scientific facilities and instruments used annually by more than 19,000 researchers worldwide to extend the frontiers of science.

From 1992 to 2002, Orbach served as chancellor of the University of California, Riverside. Under his leadership, the university doubled in size, achieved national and international recognition in research, and led the University of California system in diversity and educational opportunity. In addition to his administrative duties at the university, he also sustained an active research program; worked with postdoctoral, graduate, and undergraduate students in his laboratory; and taught the freshman physics course each year.

After beginning his academic career as a postdoctoral fellow at Oxford University, Orbach became an assistant professor of applied physics at Harvard University. He later joined the faculty of the University of California, Los Angeles (UCLA) and subsequently served for a decade as provost of UCLA's College of Letters and Science.

Orbach's research in theoretical and experimental physics has resulted in the publication of more than 240 scientific articles. A fellow of the American Physical Society and the American Association for the Advancement of Science, Orbach has also held numerous visiting professorships at universities around the world. He serves as a member of twenty scientific, professional, and civic boards.

Orbach holds a bachelor's degree in physics from the California Institute of Technology and a PhD in physics from the University of California, Berkeley, where he was elected to Phi Beta Kappa. He and his wife, Eva, have three children, seven grandchildren, and three stepgrandchildren.

# Master's and Undergraduate Commencement Speaker Jeffrey R. Immett\_



Jeffrey R. Immelt, chairman of the board and chief executive officer of General Electric, is the ninth chairman in the company's 128-year history. Appointed to his post in September 2001, Immelt had previously served as president and chairman-elect of General Electric (GE) beginning in November 2000.

Immelt began his GE career in 1982. Over the last twenty-four years, he has held a series of global leadership roles in GE's plastics, appliance, and medical businesses. He became an officer of GE in 1989, and joined the GE Capital Board in 1997.

In 2005 and 2006, *Barron's* named Immelt one of the World's Best CEOs. Under his leadership, GE has been named "America's Most Admired Company" three times in a poll conducted by *FORTUNE* magazine and the world's most respected company in polls conducted by *Barron's* and the *Financial Times*.

Chairman of The Business Council, Immelt serves on the boards of three nonprofit organizations: Catalyst, devoted to advancing women in business; Robin Hood, focused on addressing poverty in New York City; and the New York Federal Reserve Bank.

Immelt holds a bachelor's degree in applied mathematics from Dartmouth College (1978) and an MBA from Harvard University (1982). He and his wife, Andrea, have one daughter.



The Mace

In academic ceremonies, the mace is an ornamental staff carried as a symbol of authority. The office of the mace bearer, though purely ornamental, dates back to medieval England when special occasions required the use of a bodyguard. In colonial America, the mace became a symbol of office when it was used in conjunction with academic regalia.

The Georgia Tech mace carried in today's ceremony was designed by Cabell Heyward, a former research scientist in the College of Architecture, and was first used in April 1988 at the presidential installation of John P. Crecine. The mace was made possible by a gift from the Georgia Tech Student Foundation and the Class of 1934.

The primary focus of the mace is its three brass rods, which demonstrate the principle of "tensegrity," a concept of structure combining tension and integrity developed by R. Buckminster Fuller in 1927. The integrity, or wholeness, of the mace is maintained by each of the rods being held in place by the tension of the steel wire; the rods do not touch one another at any point.

The brass rods symbolize the three primary components of Georgia Tech's mission: education, research, and service. The gold color of the brass and the white color of the steel wire represent Georgia Tech's colors. The mace also incorporates three silver metallic seals, which are reproductions of the official seal of the state of Georgia, the original seal of Georgia Tech, and the current seal of the Institute.

The mace was fabricated by Mr. Heyward and Arthur Schoenfeld, who are both formerly with the Center for Assistive Technology and Environmental Access in the College of Architecture, in conjunction with Atlanta jeweler Robert Nagle.



# Academics, Research, and Athletics

### College of Computing

The College of Computing houses one of the largest interdisciplinary computer science programs in the country, forging relationships across campus and with universities around the world. The College provides the highest quality instruction and is dedicated to the integration of computing knowledge into all aspects of life. The faculty of the College of Computing are the creators of the Threads<sup>TM</sup> platform in undergraduate computer science education. Threads<sup>TM</sup> has gained significant notoriety as a way to approach all science and engineering education because it requires learning basic and advanced computing skills in the context they will be used rather than forcing all students to take the same classes.

The College also has five interdisciplinary research centers: the Georgia Tech Information Security Center (GTISC); the Graphics, Visualization, and Usability Center (GVU); Center for Experimental Research in Computer Systems (CERCS); the Robotics & Intelligent Machines Center at Georgia Tech (RIM@GT); and the Algorithms and Randomness Center & ThinkTank (ARC ThinkTank).

A total of 1,483 students are enrolled in the College, including approximately 927 undergraduates and 556 graduate students.

### Ivan Allen College of Liberal Arts

The Ivan Allen College, created in 1990, is the liberal arts college of Georgia Tech. The curriculum and research initiatives of the College explore the crucial intersections of technology, the physical sciences, the humanities, and the social sciences. The College includes six degree-granting schools: Economics; History, Technology, and Society; the Sam Nunn School of International Affairs; Literature, Communication, and Culture; Modern Languages; and Public Policy. The College currently

has 1,000 graduate and undergraduate majors.

Ivan Allen College is a nationally recognized leader in a range of fields including digital information and interactive game design, educational technologies, Internet governance, international economics, international security, and the advancement of women in science and engineering, environmental policy, and technology policy. It offers a range of language and culture programs including the Languages for Business and Technology Program. It is also the home of Georgia Tech's Army, Navy, and Air Force ROTC units. Ivan Allen graduates have gone on to leadership roles in law, industry, government, and education.

### College of Architecture

The School of Architecture became the College of Architecture in 1975. In the fall of 2006, 780 undergraduate and 370 graduate students were enrolled in the various academic programs of the College, including architecture, building construction, city and regional planning, doctoral studies, industrial design, and music. In fall 2006, the Master of Science in Music Technology degree was approved. An additional 1,140 students, representing all colleges at Georgia Tech, enrolled in music courses each semester in 2006-07.

Some of the College's more prominent alumni include John Portman (1950), John Portman and Associates, designer of Peachtree Center; George Heery (1950), former chairman of the board, Heery International, designer of the Coca-Cola Building; Thomas W. Ventulett III (1958), senior principal of Thompson, Ventulett, Stainback and Associates, designer of Technology Square in Atlanta and the McCormick Place complex in Chicago; Mack Scogin (1967), former chair of the Department of Architecture at Harvard University; and Michael Arad (1999), designer of the World Trade Center Memorial in New York.

Research programs in the College include the Center for Assistive Technology and Environmental Access, the Construction Resources Center, the Center for Geographic Information Systems, the IMAGINE Group, the Advanced Wood Products Laboratory, and the Center for Quality Growth and Regional Development.

### College of Management

The intersection of business and technology is at the heart of the College of Management, the business school at Georgia Tech. Today that focus is more relevant than ever before. Leveraging Georgia Tech's strengths in entrepreneurship and technology innovation, the program grounds students in critical thinking and teaches them to perform in a highly technological and global environment. The interdisciplinary nature of the curriculum stresses teamwork, cultural diversity, and relevant solutions to real-world problems to create a solid educational foundation for the business leaders of tomorrow.

Georgia Tech's business school, which enrolled approximately 1,300 undergraduates and 250 graduate students in fall 2006, has earned a place among the most highly respected business programs in the nation since it was established in 1913. Today, the business school offers bachelor's, MBA, executive master's, and PhD degrees, as well as a wide range of programs for executives and professionals.

## College of Sciences

Established from the former College of Sciences and Liberal Studies, the College of Sciences provides programs in the natural, mathematical, and behavioral sciences.

The specialized academic programs in the Schools of Applied Physiology, Biology, Chemistry and Biochemistry, Earth and Atmospheric Sciences, Mathematics, Physics, and Psychology attract students who have a strong interest in science and mathematics and are interested in relating their educational experience to social, governmental, industrial, and postgraduate fields.

In the fall of 2006, the College enrollment was 1,156 undergraduate students and 770 graduate students. Some highprofile graduates of the College of Sciences are Ashworth Stull (1937), inventor of the "White Glue" that became known as Elmer's Glue; Glen P. Robinson Jr. (1948, 1950), founder of Scientific-Atlanta and owner of patents on solar energy and antenna systems and energy; Kary B. Mullis (1966), inventor of polymerase chain reactions and a 1993 Nobel Prize recipient in chemistry; Gilbert F. Amelio (1965, 1967, 1968), former chairman and CEO, Apple Computer; and Nancy "Jan" Davis (1975), astronaut.

### College of Engineering

From the opening of the Institute and the establishment of the School of Mechanical Engineering in 1888, the College of Engineering has continually grown. Today, the College incorporates nine engineering schools with a fall 2006 full-time enrollment of 9,843 undergraduate and graduate students. It consistently ranks among the top five engineering schools in the country, both in size and program quality.

The current dean of the College, Don P. Giddens (1967), earned all three of his degrees at Tech. Other outstanding alumni include: Ronald Wayne Allen (1964), former chairman and CEO, Delta Air Lines; former President Jimmy Carter (1946); Michael T. Duke (1971), president and CEO, Wal-Mart USA; Walter G. Ehmer (1989), president and COO, Waffle House Inc.; Thomas L. Gossage (1957), former chairman, president, and CEO, Hercules; H. Scott Howell (1951), executive vice president (retired), Russell Corp.; James R. Jolly Jr. (1964), chairman and CEO, Johnson and Johnson Industries; John W. Keys III (1964), commissioner, U.S. Bureau of Reclamation; Sandra H. Magnus (1996), NASA astronaut; Thomas J. Malone (1963), executive vice chairman (retired), Milliken and Co.; David A. Perdue (1972, 1976), chairman and CEO, Dollar General; Agustin A. "Gus" Ramirez (1968, 1969), chairman, president,

H. Milton Stewart (1961), former chairman and CEO, the Standard Group Inc.; Robert T. "Bobby" Jones (1922), world-renowned golfer; Arthur Murray (1923), legendary dance instructor; and George W. Woodruff (1917), philanthropist.

### Athletics

At Georgia Tech, academics and athletics truly do mix, and the Institute is rich in both traditions. Tech competes on the NCAA Division I level within the twelvemember Atlantic Coast Conference, a league that places high emphasis on academics. Memorable alumni include Robert Tyre "Bobby" Jones, 1930 winner of golf's Grand Slam; Olympic track gold medalists Antonio McKay, Derrick Adkins, and Derek Mills; basketball standouts Mark Price and John Salley; baseball greats Nomar Garciaparra and Jason Varitek; professional golfers David Duval, Stewart Cink, and Matt Kuchar; and fourteen members of the National Football Foundation's College Football Hall of Fame.

Tech athletes have been led by legendary coaches such as Bobby Dodd, 1945-66; John Heisman, 1904-19; William Alexander, 1920-44; John "Whack" Hyder, 1952-73; and Bobby Cremins, 1982-2000.

Intramural sports are available to all students. More than twenty activities, ranging from crew to weight training, are offered.

### Georgia Tech Research Institute

The Georgia Tech Research Institute (GTRI) is the nonprofit, applied research arm of the Georgia Institute of Technology. GTRI conducts world-class research, delivering leading edge, real-world solutions and training to industry and government organizations in Georgia, across the nation, and throughout the world. GTRI's work also promotes Georgia's industrial and economic development, while encouraging development and protection of Georgia's natural resources.

GTRI's research is largely focused on defense and security, but also has an outstanding track record for using that research to find unique solutions for government and industry in the healthcare, environment, and energy markets.

GTRI is home to many of the nation's leading scientists and engineers. Approximately 1,200 employees perform or support more than \$120 million in research yearly for clients in government, industry, and academia. GTRI is also the largest employer of Georgia Tech students, providing real-world experience for nearly 300 students annually.

### Library and Information Center

The Georgia Tech Library functions as a client-oriented information center focusing on the data and information needs of students, faculty, and staff.

The first library of Georgia Tech was established in 1899 and consisted of a room in the Administration Building housing fewer than two thousand volumes. Now the library contains more than 1 million volumes, a complete collection of U.S. patents, and more than 2 million technical reports, government documents, and industrial standards.

The explosion of scientific and technical information and the advent of computing, networking, and multimedia technologies are the foundation of the evolution of the library from a building of books to a learning and information center. The library was the first in the nation to provide local online information retrieval capabilities. Today, the library leads the nation in providing technologically robust environments in support of student learning.

and CEO, Husco International;

# Academic Degrees

### The Bachelor's Degree

The bachelor's degree is the oldest academic degree used by American colleges and universities. The degree, which represents completion of a four-year course of study, was first awarded in 1642 to the graduating class of Harvard College.

## The Master's Degree

The master's degree represents the completion of one or two years of study beyond the bachelor's degree. The degree dates back to the oldest universities in Europe and usually requires a thesis and an oral examination.

### The Doctoral Degree

The doctoral degree is the most advanced academic degree conferred by American institutions of learning. "Doctor," which means teacher or instructor, was used as a title in the twelfth century to denote men of great learning.

# Traditions

### Academic Regalia

The academic regalia worn by today's participants is a colorful relic dating back to the Middle Ages, when education was a function of religious organizations. The monks' habit and the cowl worn over their heads were predecessors of the modern black gowns and hoods. The mortarboard was developed from the skullcaps worn during medieval days by churchmen officiating at religious services.

In 1894, American universities standardized gown styles for the three different types of degrees. Doctoral degree candidates wear the traditional black gown with full, round sleeves, velvet facings on the front, and velvet bars on the sleeves. Hoods are lined with the color of the university granting the degree. Hoods at Georgia Tech are lined in white and gold. The doctoral hood is distinguished by its blue trim, which is the color representing philosophy.

Master's degree candidates also wear the traditional black gown with full-length square sleeves that have a crescent-shaped piece hanging from each sleeve. The master's hoods are also lined in white and gold and are distinguished on the outside by gold trim, the color of science. Recipients of the bachelor's degree at Tech wear a plain black gown and no hood.

Caps used by all Tech graduates are traditional mortarboards, and tassels are white and gold.

### The Alma Mater

Music by Frank Roman Words by I. H. Granath

Oh, sons of Tech, arise, behold! The Banner as it reigns supreme, For from on high the White and Gold Waves in its triumphant gleam. The spirit of the cheering throng Resounds with joy revealing A brotherhood in praise and song, In memory of the days gone by. Oh Scion of the Southland! *In our hearts you shall forever fly.* We cherish thoughts so dear for thee, Oh, Alma Mater in our prayer. We plead for you in victory, And in the victory we share! But when the battle seems in vain Our spirits never falter, We're ever one in joy or pain And our union is a lasting bond. Oh! May we be united Till the victory of life is won.

### The 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.

## Commencement Committee.

#### Alumni Programs

David Stokes

#### Announcer

Nora Cotille-Foley, Dr. William Johnson, and Masato Kikuchi

#### Campus Police

Police Chief Teresa Crocker and staff

#### **Ferst Center Theatre**

Aishah Pacheco and staff

#### **Graduate Studies**

Maureen Kilroy and Tatianna Matthews

### Institute Communications and Public Affairs

Aimee Anderson and staff

#### Music Department

Terri Bassett, Frank Clark, Ron Mendola, Christopher Moore, and Jerry Ulrich

#### **Parking Office**

Robert Furniss and staff

#### **Plant Operations**

Brandon Ford and Staging staff

#### Registrar's Office

Candy Carson, LaWanda Cole, Ann Laros, David Lowery, Reta Pikowsky, Deanna Sterns, Craig Womack, and staff

#### Student Affairs (AdAPTS)

Tameeka Hunter

White and gold ribbons on today's diplomas were hand-tied by disabled employees of the Bobby Dodd Center in Conyers, Georgia. Former Georgia Tech Coach Bobby Dodd was instrumental in securing funding for the vocational rehabilitation training facility that bears his name.

Cover art provided by Overly, a division of Saltus Press, Worcester, Massachusetts.

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