

COLUMBIA UNIVERSITY
THE FU FOUNDATION SCHOOL OF
ENGINEERING AND APPLIED SCIENCE

TWO THOUSAND THIRTEEN

Celebrating Faculty Excellence

ACCLAIMING THE AWARDS, HONORS,
AND RECOGNITIONS THAT OUR FACULTY
RECEIVED DURING THE PAST YEAR



Excellence

Excellence

Introduction



*A*s we gather today to celebrate the significant accomplishments of our faculty during the past academic year, we recognize that our honorees are now becoming part of the lineage of faculty excellence that began with our first dean, Charles F. Chandler. The contributions of Professor Chandler illustrate that, from the beginning, our School's faculty have been creative problem solvers whose work directly and profoundly impacts people's lives.

It is particularly appropriate to spotlight Chandler as we are preparing to celebrate the 150th anniversary of the founding of our School in 1864. Chandler's contributions were well recognized by the City of New York due to his focus on the City's public health—from ensuring the safety of milk and drinking water to advocating for indoor plumbing to providing free vaccinations.

I believe that a similar recognition exists today of the power of engineering and the applied sciences to improve the human condition, finding solutions that can impact such basic human needs as access to food, clean water, and clear air.

As faculty, not only are we working to advance society through our research, but also we are responsible for educating the next generation of engineers and applied scientists, our leaders for tomorrow. Through our teaching, mentoring, and example, we are preparing our students to use their intellect, innovation, and creativity to make the lives of future generations better.

Mary C. Boyce

Dean of Engineering

Morris A. and Alma Schapiro Professor



MARK A. CANE

Professor, Applied Physics and Applied Mathematics

NATIONAL ACADEMY OF SCIENCES

elected a member of the National Academy of Sciences in recognition of his distinguished and continuing achievements in original research

2013 MAURICE EWING MEDAL

given by the American Geophysical Union for significant original contributions to the scientific understanding of the processes in the ocean; for the advancement of oceanographic engineering, technology, and instrumentation; and for outstanding service to the marine sciences

Named Professors



GERARD ATESHIAN

Andrew Walz Professor of Mechanical Engineering

MECHANICAL ENGINEERING



JULIA HIRSCHBERG

Percy K. and Vida L. W. Hudson Professor of Computer Science

COMPUTER SCIENCE



DAVID D. YAO

*Piyasombatkul Family Professor of Industrial Engineering
and Operations Research*

INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH

Singular Honors



ALFRED V. AHO

Lawrence Gussman Professor of Computer Science

ROYAL SOCIETY OF CANADA

elected a fellow of the Royal Society of Canada, the highest honor a scholar can achieve in the arts, humanities, and sciences in Canada



DONALD GOLDFARB

Alexander and Hermine Avnessians Professor of Industrial Engineering and Operations Research

2013 KHACHIYAN PRIZE, INFORMS OPTIMIZATION SOCIETY
for outstanding lifetime contributions to the field of optimization



UPMANU LALL

*Alan & Carol Silberstein Professor of Earth and Environmental Engineering;
Professor, Civil Engineering and Engineering Mechanics*

HENRY DARCY MEDAL, EUROPEAN GEOSCIENCES UNION,
established by the Division on Hydrological Sciences, in recognition of
outstanding scientific contributions in water resources research and water
resources engineering and management

Faculty Early Career Development Awards



TIFFANY A. SHAW

Assistant Professor, Applied Physics and Applied Mathematics

PACKARD FELLOWSHIP

to support her research on moisture transport and its interaction with large-scale flow patterns and the impact of climate change

NSF CAREER AWARD

to support her research on the role of moisture transport in the Northern Hemisphere summer circulation and its variability and future change



SIMHA SETHUMADHAVAN

Associate Professor, Computer Science

ALFRED P. SLOAN RESEARCH FELLOWSHIP

given to early-career scientists and scholars whose achievements and potential identify them as the next generation of scientific leaders



AUGUSTIN CHAINTREAU

Assistant Professor, Computer Science

NSF CAREER AWARD

to investigate analytics for data regained by users

ACM SIGMETRICS RISING STAR AWARD

in recognition of his significant contributions to the analysis of emerging distributed digital and social networking system

Faculty Early Career Development Awards



HAYDEN HUANG

Assistant Professor, Biomedical Engineering

NSF CAREER AWARD

to support his research on three-dimensional cell mechanics



MARTHA A. KIM

Assistant Professor, Computer Science

NSF CAREER AWARD

to support her research on energy tracking and monitoring techniques to audit and control software energy consumption



CHRIS A. MARIANETTI

Associate Professor, Applied Physics and Applied Mathematics

DARPA YOUNG FACULTY AWARD

given to rising research stars in junior faculty positions at U.S. academic institutions to expose them to the needs of the Department of Defense and DARPA's program development process

Election to Professional Societies



DANIEL BIENSTOCK

*Professor of Industrial Engineering and Operations Research
and of Applied Physics and Applied Mathematics*

FELLOW, INSTITUTE FOR OPERATIONS RESEARCH AND THE
MANAGEMENT SCIENCES (INFORMS)

for outstanding lifetime achievement in operations research and the
management sciences



KARTIK CHANDRAN

Associate Professor, Earth and Environmental Engineering

FELLOW, WATER ENVIRONMENT FEDERATION (WEF),

which recognizes WEF members' achievements, stature, and contributions
in the water field, from areas of research and regulation to education
and leadership



JINGGUANG CHEN

Thayer Lindsley Professor of Chemical Engineering

FELLOW, AMERICAN CHEMICAL SOCIETY

for achievements focused on the understanding and application of carbide
and bimetallic catalysts and electrocatalysts for energy applications

ELECTED CHAIR, CATALYSIS DIVISION, AMERICAN CHEMICAL SOCIETY,
world's largest scientific society committed to "Improving people's lives
through the transforming power of chemistry"

Election to Professional Societies



GUILLERMO M. GALLEGO

Liu Family Professor of Industrial Engineering and Operations Research

FELLOW, INSTITUTE FOR OPERATIONS RESEARCH AND THE MANAGEMENT SCIENCES (INFORMS)

for contributions to revenue management and inventory theory that have provided new insights and effective methods for problem solving, and for compelling leadership at Columbia University and in the profession

FELLOW, MANUFACTURING AND SERVICE OPERATIONS MANAGEMENT SOCIETY (MSOM),

promoting the enhancement and dissemination of knowledge, and the efficiency of industrial practice, related to the operations function in manufacturing and service enterprises



X. EDWARD GUO

Professor, Biomedical Engineering

MEMBER, BOARD OF DIRECTORS OF THE ORTHOPAEDIC RESEARCH SOCIETY,

advancing the global orthopaedic research agenda through excellence in research, education, collaboration, communication, and advocacy



TONY F. HEINZ

David M. Rickey Professor of Optical Communications, Electrical Engineering

FELLOW, AMERICAN VACUUM SOCIETY (AVS)

for sustained and outstanding technical contributions in areas of interest to AVS

Election to Professional Societies



ANDREAS H. HIELSCHER

*Professor of Biomedical Engineering and of
Electrical Engineering*

FELLOW, AMERICAN INSTITUTE FOR MEDICAL AND BIOLOGICAL
ENGINEERING (AIMBE),

the authoritative voice and advocate for the value of medical and
biological engineering to society



JULIA B. HIRSCHBERG

Professor, Computer Science

ELECTED COUNCILOR, AMERICAN ASSOCIATION OF
ARTIFICIAL INTELLIGENCE,

devoted to advancing the scientific understanding of the mechanisms
underlying thought and intelligent behavior and their embodiment
in machines

ELECTED TO THE EXECUTIVE BOARD, ASSOCIATION FOR
COMPUTATIONAL LINGUISTICS (NORTH AMERICAN CHAPTER),
the international scientific and professional society for people working
on problems involving natural language and computation

ELECTED TO THE EXECUTIVE BOARD, THE COMPUTING RESEARCH
ASSOCIATION (CRA),
enhancing innovation by joining with industry, government, and
academia to strengthen research and advanced education in computing

Election to Professional Societies



CHRISTOPHER R. JACOBS

Associate Professor, Biomedical Engineering

FELLOW, AMERICAN INSTITUTE FOR MEDICAL AND BIOLOGICAL ENGINEERING (AIMBE),

the authoritative voice and advocate for the value of medical and biological engineering to society



SOULAYMANE KACHANI

Professor of Professional Practice, Industrial Engineering and Operations Research; Vice Dean for Academic Programs

INDUCTED INTO THE WORLD ECONOMIC FORUM'S YOUNG GLOBAL LEADERS, CLASS OF 2013

for proven track record of professional accomplishments, breadth of expertise, commitment to society, shared purpose of creating a better world, and desire to turn personal success into global significance through the scaling up of ideas that lead to impactful change



BARCLAY MORRISON

Associate Professor, Biomedical Engineering

ELECTED COUNCIL MEMBER, INTERNATIONAL RESEARCH COUNCIL ON BIOMECHANICS OF INJURY,

the premier forum for researchers in the field of injury biomechanics

Election to Professional Societies



ANDREW W. SMYTH

Professor, Civil Engineering and Engineering Mechanics

FELLOW, ENGINEERING MECHANICS INSTITUTE, AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE),

a new institute of the American Society of Civil Engineers (ASCE) dedicated to serving the engineering community through the development and application of engineering mechanics



CLIFFORD S. STEIN

Professor of Industrial Engineering and Operations Research and of Computer Science

FELLOW, ASSOCIATION FOR COMPUTING MACHINERY (ACM)

for contributions to the theory of combinatorial optimization and to the design and analysis of graph algorithms



SALVATORE J. STOLFO

Professor, Computer Science

APPOINTED TO NATIONAL ACADEMIES NATIONAL RESEARCH COUNCIL PANEL ON INFORMATION SCIENCE AT THE ARMY RESEARCH LABORATORY (ARL),

reviewer of the scientific and technical quality of the ARL's programs of research and development related to its information science technical area

Election to Professional Societies



JOSEPH F. TRAUB

Edwin Howard Armstrong Professor of Computer Science

FELLOW, AMERICAN MATHEMATICAL SOCIETY,
advancing the interests of mathematical research and scholarship



GORDANA VUNJAK-NOVAKOVIC

The Mikati Foundation Professor of Biomedical Engineering

ELECTED TO EXECUTIVE COMMITTEE, SECTION FOR BIOENGINEERING,
NATIONAL ACADEMY OF ENGINEERING

FOUNDING FELLOW, INTERNATIONAL FELLOWS OF TISSUE
ENGINEERING AND REGENERATIVE MEDICINE,
created to recognize a distinguished leader within the tissue engineering
and regenerative medicine field

ELECTED TO ACADEMIA EUROPEA,
an international organization of eminent scholars, who span the academic
disciplines of humanities, social, physical, and life sciences as well as
mathematics, engineering, and medicine

ELECTED TO SERBIAN ACADEMY OF SCIENCES AND ARTS,
the highest scientific and art institution in the Republic of Serbia

ELECTED TO SERBIAN NATIONAL ACADEMY OF ENGINEERING,
for engineers with notable professional, scientific, and educational
achievements

Recognition/Achievement Awards



DIMITRIS ANASTASSIOU

Charles Batchelor Professor of Electrical Engineering

WINNER, SAGE BIONETWORKS/DREAM BREAST CANCER
PROGNOSIS CHALLENGE

for developing a new computational model that is highly predictive of breast cancer survival



GERARD A. ATESHIAN

*Professor of Mechanical Engineering and of
Biomedical Engineering*

2013 OARSI BASIC SCIENCE AWARD

given by Osteoarthritis Research Society International for outstanding work in the area of cartilage mechanics, lubrication, and tissue engineering



PETER N. BELHUMEUR

Professor, Computer Science

2012 MARK EVERINGHAM PRIZE FOR RIGOROUS EVALUATION

for “Tom-vs-Pete Classifiers and Identity-Preserving Alignment for Face Verification,” given at the annual British Machine Vision Conference (BMVC); co-recipient with Thomas Berg



SIMON J. L. BILLINGE

*Professor of Materials Science and of Applied Physics and
Applied Mathematics*

NEUTRON SCATTERING SOCIETY OF AMERICA (NSSA) SERVICE AWARD

Recognition/Achievement Awards



JOSE BLANCHET

Associate Professor, Industrial Engineering and Operations Research

PROFESSIONAL MERIT AWARD, ITAM (MEXICO)

given to distinguished alumni for outstanding professional achievement



SHIH-FU CHANG

Richard Dicker Professor of Telecommunications, Electrical Engineering; Professor of Computer Science; and Senior Vice Dean

2012 IEEE SIGNAL PROCESSING SOCIETY TECHNICAL ACHIEVEMENT AWARD

for pioneering contributions to signal processing for multimedia content analysis and retrieval



TONY JEBARA

Associate Professor, Computer Science

IBM FACULTY AWARD

given to outstanding researchers at leading universities worldwide to foster collaboration with those in IBM research



JOHN R. KENDER

Professor, Computer Science

BEST REVIEWER AWARD

given at the Association for Computing Machinery (ACM) International Conference on Multimedia Retrieval (ICMR)

Recognition/Achievement Awards



ANGELOS D. KEROMYTIS

Associate Professor, Computer Science

ACM DISTINGUISHED SCIENTIST

recognized by the Association for Computing Machinery (ACM) for significant accomplishments in systems security and network security



IOANNIS KYMISSIS

Associate Professor, Electrical Engineering

IBM FACULTY AWARD

given to outstanding researchers at leading universities worldwide to foster collaboration with those in IBM research

2012 MIT/USDOE CLEAN ENERGY PRIZE, FIRST PRIZE

for designing a radiator retrofit that increases the energy efficiency of steam heating systems; co-recipient with Marshall Cox and John Sarik



JEFFREY W. KYSAR

Professor, Mechanical Engineering

BEST POSTER AWARD, NATIONAL SYNCHROTRON LIGHT SOURCE (NSLS) AND CENTER FOR FUNCTIONAL NANOMATERIALS (CFN) USERS' MEETING, BROOKHAVEN NATIONAL LABORATORY



HOE I. LING

Professor, Civil Engineering and Engineering Mechanics

SH. M. AYDALIEV MEDAL, KAZAKHSTAN GEOTECHNICAL SOCIETY

for significant achievements and innovations in soil mechanics, geomechanics, and underground construction

Recognition/Achievement Awards



DEBASIS MITRA

Professor, Electrical Engineering

2012 ACM SIGMETRICS ACHIEVEMENT AWARD

in recognition of his fundamental contributions to the modeling, analysis, and design of communication networks

2012 ARNE JENSEN LIFETIME ACHIEVEMENT AWARD

given by the International Advisory Council of the International Teletraffic Congress, a worldwide forum for all questions related to network and service performance, management, and assessment, both present and futuristic



ARVIND NARAYANASWAMY

Assistant Professor, Mechanical Engineering

BEST POSTER AWARD, HEAT TRANSFER DIVISION, 2012 IMECE MICRO NANO FORUM

for “Proximity Effects in Radiative Heat Transfer”; co-recipient with Karthik Sasihithlu



FENIOSKY A. PEÑA-MORA

Edwin Howard Armstrong Professor of Civil Engineering and Engineering Mechanics; Professor of Earth and Environmental Engineering and of Computer Science

J. JAMES R. CROES MEDAL, AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

for “Integrated Sequential As-Built and As-Planned Representation with D4AR Tools in Support of Decision-Making Tasks in the AEC/FM Industry”; coauthored with Mani Golparvar-Fard and Silvio Savarese

BEST POSTER AWARD, CONSTRUCTION RESEARCH CONGRESS

“Robust Material Recognition for Automated Building Information Modeling from Unordered Site Image Collections”; co-recipient with M. Golparvar-Fard and A. Dimitrov

Recognition/Achievement Awards



MICHAEL P. SHEETZ

William R. Kenan Jr. Professor of Cell Biology, Biological Sciences, and Biomedical Engineering

2012 ALBERT LASKER BASIC MEDICAL RESEARCH AWARD,
honoring scientists whose fundamental investigations have provided techniques, information, or concepts contributing to the elimination of major causes of disability and death

2012 WILEY AWARD IN BIOMEDICAL SCIENCES,
recognizing contributions that have opened new fields of research or have advanced novel concepts or their applications in a particular biomedical discipline



PONISSERIL SOMASUNDARAN

LaVon Duddleson Krumb Professor of Mineral Engineering, Earth and Environmental Engineering

LEGION OF HONOR MEMBER, SOCIETY FOR MINING, METALLURGY, AND EXPLORATION (SME),
a member society of the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME), one of the first national engineering societies established in the United States



YANNIS P. TSVIDIS

Charles Batchelor Professor of Electrical Engineering

OUTSTANDING ACHIEVEMENT AWARD, UNIVERSITY OF MINNESOTA, MINNEAPOLIS
given by the University of Minnesota to distinguished alumni

Recognition/Achievement Awards



VENKAT VENKATASUBRAMANIAN

*Samuel Ruben–Peter G. Viele Professor of Engineering,
Chemical Engineering*

BEST POSTER AWARD, EUROPEAN SYMPOSIUM ON COMPUTER-AIDED
PROCESS ENGINEERING

for “Intelligent Alarm System Applied to Continuous Pharmaceutical
Manufacturing,” coauthored with A. Gupta, A. Giridhar, and G. Reklaitis



WARD WHITT

*Wai T. Chang Professor of Industrial Engineering and
Operations Research*

2012 INFORMS MANUFACTURING AND SERVICE OPERATIONS
MANAGEMENT DISTINGUISHED FELLOW AWARD

in recognition of outstanding research and scholarship in
operations management



PETER R. KINGET

Professor, Electrical Engineering

IOANNIS KYMISSIS

Associate Professor, Electrical Engineering



CO-WINNERS, 2012 INTERDIGITAL INNOVATION
CHALLENGE, FIRST PRIZE

for an invention that uses ultrasound for wireless communication;
co-recipients with K. Yadav

Special Recognitions



PETER N. BELHUMEUR

Professor, Computer Science

SELECTEE, *SCIENTIFIC AMERICAN* STAFF PICKS 2012:

“10 Apps for Your Smartphone or Tablet” for “Leafsnap,” a free electronic field guide that uses visual-recognition software to help identify tree species from photographs of their leaves



CHRISTINE P. FLEMING

Assistant Professor, Electrical Engineering

FORBES “30 UNDER 30,” SCIENCE AND HEALTHCARE

for developing tools for imaging the muscle tissue of the heart, to give heart surgeons a more detailed view to help diagnose disease and guide treatment

MIT TECHNOLOGY REVIEW, 35 INNOVATORS UNDER 35

for designing a new type of catheter capable of imaging heart muscle, available in real time during cardiac procedures



MARTHA A. KIM

Assistant Professor, Computer Science

SELECTEE, IEEE MICRO’S TOP PICKS FROM THE COMPUTER ARCHITECTURE CONFERENCES

for “Collection, Analysis, and Uses of Parallel Block Vectors,” coauthored with Melanie Kambadur and Kui Tang

Special Recognitions



RICHARD M. OSGOOD JR.

Higgins Professor of Electrical Engineering; Professor, Applied Physics and Applied Mathematics

MOST DOWNLOADED REVIEW ARTICLES ON OPTICAL FIBERS IN JOURNALS PUBLISHED BY THE OPTICAL SOCIETY OVER THE PAST TWO YEARS

for “Engineering Nonlinearities in Nanoscale Optical Systems: Physics and Applications in Dispersion-Engineered Silicon Nanophotonic Wires,” coauthored with N. C. Panoiu, J. I. Dadap, X. Liu, X. Chen, I. Hsieh, E. Dulkeith, W. M. Green, and Y. A. Vlasov



SIMHA SETHUMADHAVAN

Associate Professor, Computer Science

SELECTEE, IEEE MICRO’S TOP PICKS FROM THE COMPUTER ARCHITECTURE CONFERENCES

for “A Quantitative, Experimental Approach to Measuring Processor Side-Channel Security,” coauthored with John Demme, Robert Martin, and Adam Waksman



VENKAT VENKATASUBRAMANIAN

Samuel Ruben–Peter G. Viele Professor of Engineering, Chemical Engineering

MOST CITED PAPER IN *COMPUTERS & CHEMICAL ENGINEERING* FROM 2003 TO 2013, ACCORDING TO ELSEVIER

for “A Review of Process Fault Detection and Diagnosis, Part I: Quantitative Model-Based Methods” and “A Review of Process Fault Detection and Diagnosis, Part III: Process History Based Methods,” coauthored with R. Rengaswamy, S. N. Kavuri, and K. Yin; and “A Review of Process Fault Detection and Diagnosis, Part II: Qualitative Models and Search Strategies,” coauthored with R. Rengaswamy and S. N. Kavuri

Special Recognitions



CHRIS H. WIGGINS

Associate Professor, Applied Physics and Applied Mathematics

PANEL ORGANIZER, SXSW INTERACTIVE CONFERENCE 2012
for “Keeping Kids off the Street: Wall St. vs. Startups”



CHANGXI ZHENG

Assistant Professor, Computer Science

FORBES “30 UNDER 30,” SCIENCE AND HEALTHCARE
for building models and algorithms to create realistic virtual
environments—both visible and audible—for a wide range
of applications



HAYDEN HUANG

Assistant Professor, Biomedical Engineering

CHRISTOPHER R. JACOBS

Associate Professor, Biomedical Engineering



COAUTHORS OF *AN INTRODUCTION TO CELL MECHANICS
AND MECHANOBIOLOGY*,

the first cell mechanics textbook to be geared specifically toward students
with diverse backgrounds in engineering and biology

Notable Professional Recognitions



KEREN BERGMAN

Charles Batchelor Professor of Electrical Engineering

MEMBER, NATIONAL RESEARCH COUNCIL PANEL ON DIGITIZATION AND COMMUNICATIONS SCIENCE, ARMY RESEARCH LABORATORY (ARL), COMPUTATIONAL AND INFORMATION SCIENCES DIRECTORATE (CISD)



JINGGUANG CHEN

Thayer Lindsley Professor of Chemical Engineering

DIRECTOR-AT-LARGE, NORTH AMERICAN CATALYSIS SOCIETY

EDITOR, *APPLIED SURFACE SCIENCE*

EDITOR, *SURFACE SCIENCE REPORTS*

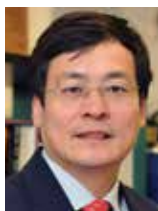


EITAN GRINSPUN

Associate Professor, Computer Science

FAST COMPANY MOST CREATIVE PEOPLE 2013

for building programs that make computer-generated hair more lifelike



X. EDWARD GUO

Professor, Biomedical Engineering

PRESIDENT, INTERNATIONAL CHINESE MUSCULOSKELETAL RESEARCH SOCIETY

Notable Professional Recognitions



HENRY S. HESS

Associate Professor, Biomedical Engineering

DISTINGUISHED FACULTY, 11TH INTERNATIONAL SUMMER SCHOOL ON
BIOCOMPLEXITY FROM GENE TO SYSTEMS, ISTANBUL

EDITOR-IN-CHIEF, *IEEE TRANSACTIONS ON NANOBIOSCIENCE JOURNAL*



ELIZABETH M. C. HILLMAN

Associate Professor, Biomedical Engineering

CHAIR, 2013 MICHAEL S. FELD BIOPHOTONICS AWARD SELECTION
COMMITTEE, THE OPTICAL SOCIETY



TONY JEBARA

Associate Professor, Computer Science

CHAIR, 31ST INTERNATIONAL CONFERENCE ON MACHINE
LEARNING (ICML 2014)



ANGELOS D. KEROMYTIS

Associate Professor, Computer Science

PROGRAM DIRECTOR, DIVISION OF COMPUTER AND NETWORK
SYSTEMS, NATIONAL SCIENCE FOUNDATION

Notable Professional Recognitions



ANDREW F. LAINE

*Percy K. and Vida L. W. Hudson Professor of
Biomedical Engineering*

MEMBER, SCIENTIFIC ADVISORY BOARD, *IEEE TRANSACTIONS ON
BIOMEDICAL ENGINEERING*,

the flagship journal for IEEE Engineering in Medicine and Biology
Society (EMBS)

CO-CHAIR, IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY
(EMBS) CONFERENCE ON BIOMEDICAL AND HEALTH INFORMATICS

IEEE EMBS is the largest professional society in the field of Biomedical
Engineering, with more than 8,000 members.



HELEN H. LU

Associate Professor, Biomedical Engineering

MEMBER, EDITORIAL ADVISORY BOARD, *NANOMATERIALS
AND TISSUE REGENERATION*

EDITOR, SPECIAL ISSUE ON COMPLEX SCAFFOLD DESIGN,
BIOMEDICAL MATERIALS



BARCLAY MORRISON

Associate Professor, Biomedical Engineering

ASSOCIATE EDITOR, *JOURNAL OF BIOMECHANICAL ENGINEERING*

Notable Professional Recognitions



AH-HYUNG ALISSA PARK

*Lenfest Junior Professor in Applied Climate Science,
Earth and Environmental Engineering*

SELECTED TO PARTICIPATE IN NAE'S 2013 U.S. FRONTIERS OF
ENGINEERING SYMPOSIUM

ASSOCIATE EDITOR, *CHEMICAL ENGINEERING SCIENCE*



PAUL SAJDA

Professor, Biomedical Engineering

SELECTED PARTICIPANT, NATIONAL ACADEMIES' KECK FUTURES
INITIATIVE (NAKFI), "THE INFORMED BRAIN IN A DIGITAL WORLD"



PETER SCHLOSSER

Vinton Professor of Earth and Environmental Engineering

BOARD MEMBER, INTERNATIONAL SUSTAINABLE DEVELOPMENT
SOCIETY (ISDRS)



HENNING G. SCHULZRINNE

*Julian Clarence Levi Professor of Computer Science;
Professor of Electrical Engineering*

INDUCTION INTO INTERNET HALL OF FAME 2013,
"INNOVATOR" CATEGORY

for co-developing protocols used by almost all Internet telephony and
multimedia applications

Notable Professional Recognitions



PONISSERIL SOMASUNDARAN

*LaVon Duddleson Krumb Professor of Mineral Engineering,
Earth and Environmental Engineering*

HONORARY ADVISER, CHINA NATIONAL ELECTRIC APPARATUS
RESEARCH INSTITUTE CO., LTD, GUANGZHOU, CHINA

CHAIR, UNILEVER AWARD COMMITTEE, AMERICAN
CHEMICAL SOCIETY



CLIFFORD S. STEIN

*Professor of Industrial Engineering and Operations Research
and of Computer Science*

CHAIR, STEERING COMMITTEE, SYMPOSIUM ON
DISCRETE ALGORITHMS



GORDANA VUNJAK-NOVAKOVIC

The Mikati Foundation Professor of Biomedical Engineering

2013 RUSHMER LECTURE, UNIVERSITY OF WASHINGTON, SEATTLE

2012 HOLLINGSWORTH DISTINGUISHED LECTURESHIP, UNIVERSITY OF
TEXAS, AUSTIN

SCIENTIFIC DIRECTOR, BOARD OF DIRECTORS, CENTER FOR ADVANCEMENT
OF SCIENCE IN SPACE (CASIS)

MEMBER, EDITORIAL BOARD, *eLIFE*, A RESEARCHER-LED, OPEN ACCESS DIGITAL
PUBLICATION FOR OUTSTANDING RESEARCH IN LIFE SCIENCE AND BIOMEDICINE

MEMBER, EXECUTIVE EDITORIAL BOARD, *TISSUE ENGINEERING*

PROGRAM CHAIR, 2013 BIOMEDICAL ENGINEERING SOCIETY
ANNUAL MEETING

MEMBER, BOARD OF DIRECTORS, CENTER FOR ADVANCEMENT OF SCIENCE

Scholarly Leadership



SUNIL K. AGRAWAL

Professor, Mechanical Engineering

KEYNOTE SPEAKER, WORKSHOP ON ASSISTIVE AND SURGICAL ROBOTICS, TAIWAN

KEYNOTE SPEAKER, 5TH WORKSHOP IN APPLIED ROBOTICS AND AUTOMATION, ROBOCONTROL 2012, BRAZIL



GUILLERMO M. GALLEGO

Liu Family Professor of Industrial Engineering and Operations Research

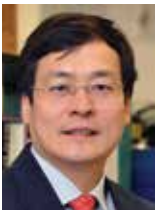
KEYNOTE SPEAKER, 2013 INFORMS ANNUAL MEETING



JONATHAN L. GROSS

Professor, Computer Science

KEYNOTE SPEAKER, 6TH INTERNATIONAL CONFERENCE ON GRAPH EMBEDDINGS AND MAPS ON SURFACES



X. EDWARD GUO

Professor, Biomedical Engineering

KEYNOTE SPEAKER, 6TH INTERNATIONAL CONGRESS OF CHINESE ORTHOPAEDIC ASSOCIATION

Scholarly Leadership



JULIA B. HIRSCHBERG

Professor, Computer Science

KEYNOTE SPEAKER, ILLINOIS SPEECH DAY, TOYOTA
TECHNOLOGY INSTITUTE



TONY JEBARA

Associate Professor, Computer Science

SPEAKER, NATIONAL ACADEMIES 2013 FRONTIERS OF
ENGINEERING CONFERENCE,

recognizing young engineers from industry, academia, and government
who are performing exceptional engineering research and technical work



KATHLEEN MCKEOWN

Henry and Gertrude Rothschild Professor of Computer Science

KEYNOTE SPEAKER, THE 2013 CONFERENCE OF THE NORTH
AMERICAN ASSOCIATION FOR COMPUTATIONAL LINGUISTICS



TAL G. MALKIN

Associate Professor, Computer Science

KEYNOTE SPEAKER, THEORY OF CRYPTOGRAPHY CONFERENCE (TCC)

Scholarly Leadership



VAN C. MOW

Stanley Dicker Professor of Biomedical Engineering

RICHARD SKALAK MEMORIAL LECTURE, UNIVERSITY OF CALIFORNIA, SAN DIEGO

KEYNOTE SPEAKER, 60TH ANNIVERSARY OF BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS



MICHAEL I. WEINSTEIN

Professor, Applied Physics and Applied Mathematics

KEYNOTE SPEAKER, CONFERENCE ON NONLINEAR WAVES, CHINESE ACADEMY OF SCIENCES

Honorary Professorships



WILLIAM E. BAILEY

Associate Professor, Applied Physics and Applied Mathematics

INVITED PROFESSOR
UNIVERSITÉ JOSEPH FOURIER, GRENOBLE



MARIA Q. FENG

Renwick Professor of Civil Engineering, Civil Engineering and Engineering Mechanics

HONORARY PROFESSOR
UNIVERSITY OF ELECTRO-COMMUNICATIONS (UEC), TOKYO

Honorary Professorships



PIERRE GENTINE

Assistant Professor, Earth and Environmental Engineering

INVITED PROFESSOR
ÉCOLE NORMALE SUPÉRIEURE, PARIS

INVITED PROFESSOR
WAGENINGEN UNIVERSITY, NETHERLANDS



HOE I. LING

Professor, Civil Engineering and Engineering Mechanics

VISITING PROFESSOR
UNIVERSITY OF SCIENCE, MALAYSIA



RICHARD W. LONGMAN

Professor of Mechanical Engineering and of Civil Engineering and Engineering Mechanics

HGS DISTINGUISHED ROMBERG PROFESSOR
UNIVERSITY OF HEIDELBERG, INTERDISCIPLINARY CENTER FOR
SCIENTIFIC COMPUTING



FRANCESCO A. VOLPE

Assistant Professor, Applied Physics and Applied Mathematics

VISITING PROFESSOR
KYOTO UNIVERSITY

Honorary Professorships



GORDANA VUNJAK-NOVAKOVIC

The Mikati Foundation Professor of Biomedical Engineering

VISITING PROFESSOR

PENN CENTER FOR MUSCULOSKELETAL DISORDERS,
UNIVERSITY OF PENNSYLVANIA

Best Papers



LUCA CARLONI

Associate Professor, Computer Science

BEST PAPER AWARD, DATE 2012

for “Compositional System-Level Design Exploration with Planning of High-Level Synthesis,” coauthored with Hung-Yi Liu and Michele Petracca

BEST PAPER AWARD, CLOUDCOM 2012

for “A Broadband Embedded Computing System for MapReduce Utilizing Hadoop,” coauthored with Younghoon Jung and Richard Neill



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EDITORS’ SUGGESTION PAPER, *PHYSICAL REVIEW A*

for “Measures of Quantum Computing Speedup,” cited by editors and referees for particular interest, importance, or clarity; co-written with Anargyros Papageorgiou



KATHLEEN MCKEOWN

Henry and Gertrude Rothschild Professor of Computer Science

BEST PAPER AWARD, 2012, PROCEEDINGS OF THE 16TH
CONFERENCE OF THE EUROPEAN ASSOCIATION FOR MACHINE
TRANSLATION (EAMT)

for “Can Automatic Post-Editing Make MT More Meaningful?”
coauthored with Kristen Parton, Nizar Habash, Gonzalo Iglesias, and
Adrià de Gispert



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Charles Batchelor Professor of Electrical Engineering



BEST PAPER AWARD IN THE LOGIC AND CIRCUIT DESIGN TRACK
OF THE 30TH IEEE INTERNATIONAL CONFERENCE ON COMPUTER
DESIGN (ICCD)

for “Designing Pipelined Delay Lines with Dynamically-Adaptive
Granularity for Low-Energy Applications,” coauthored with
Christos Vezyrtzis

Best Papers



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*Julian Clarence Levi Professor of Computer Science;
Professor of Electrical Engineering*

GIL ZUSSMAN

Associate Professor, Electrical Engineering



BEST EDUCATIONAL PAPER AWARD, GREE 2013

for “WiMax in the Classroom: Designing a Cellular Networking
Hands-on Lab,” coauthored with Jelena Marasevic and Jan Janak

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