Faculty Awards & Ph.D. Hooding Ceremony

Tuesday, May 21, 2019

DeBaun Auditorium, Edwin A. Stevens Hall
ORDER OF CEREMONY

Academic Procession

Ph.D. HOODING CEREMONY

Welcome
CONSTANTIN CHASSAPIS
Vice Provost for Graduate Education

Congratulatory Remarks
NARIMAN FARVARDIN
President

CHRISTOPHE PIERRE
Provost and Vice President for Academic Affairs

Hooding of Doctoral Candidates

Faculty Awards Ceremony

Remarks
CHRISTOPHE PIERRE
Provost and Vice President for Academic Affairs

Presentation of Faculty Awards
NARIMAN FARVARDIN
President

Recessional

Reception
To follow in the Babbio Center Atrium

The candidate list and dissertation titles are compiled with information accurate as of May 6, 2019
CHARLES V. SCHAEFER, JR. SCHOOL OF ENGINEERING AND SCIENCE

IOANNIS AGADAKOS
Code Surface Reduction By Adaptive Partitioning of Application Code and Debilitating Unused Library Code

MOHAMMAD ALNAKHLI
Joint Spectrum and Energy Efficiency Optimization in 5G Device to Device (D2D) Communication

GHALIB ALSHAMMRI
Artificial Intelligence Techniques for Diffusion-Based Bio-Molecular Nano Communication Networks

KHALID SALEH ALSHATHRI
Identification of Cellular Systems Using Deep Learning Algorithms

HATHAL SALAMAH ALWAGEED
Modulation Classification Using Deep Learning and Machine Learning Based Models

CARLOS A. CASTILLO
Inverse Optimization Approach in Multi-Phase Fluid Dynamics

SHUANGLU DAI
Multi-Modality Description and Feature Learning for Visual Understanding
CHARLES V. SCHAEFER, JR. SCHOOL OF ENGINEERING AND SCIENCE

GARY ENGLER
Stochastic Neural Algorithms

JENNIFER R. FIELD
Multi-Agent Analysis of Multi-Actuated Dynamical Systems to Inform Failure Accommodation

FABIAN FÖRGER
Privacy-Preserving Two-Party Bartering in the Semi-Honest Model

ADAM LEE FOLTZ
Experiment and Numerical Analysis of Small Caliber Gun Barrels Under Internal Pressure Fatigue Loading

BIRUK ASSEFA GEBRE
Holonomic Multi-Ball Locomotion and Adaptive Gaze Assisted Control for Mobile Remote Presence Systems

BEHNOUSH GOLCHINFAR
Health Monitoring of Structural Materials with Innovative Nondestructive Testing Methods

ZHUOQIANG JIA
Manipulation of Colloidal Crystal Structures Using External Forces
CHAO JIANG
Human-Robot Collaboration: Indoor Human Localization and Pedestrian Regulation

HANYU JIANG
GPU-Based Parallel Algorithms with Architecture-Aware Optimization for Large-Scale Process Simulation of Biological Pathways and High-Throughput Homologous Sequence Search

YIQIAN JIN
Tailorable Electrical Properties of Reduced Graphene Oxide for Wearable Sensors and Flexible Electronic Applications

MOHAMMED ABDULHAMEED O KUTBI
An Egocentric Computer Vision-Based Robotic Wheelchair

JING LIANG
Self-Defensive Antimicrobial-Loaded Microgel-Modified Surfaces

KAI LIU
Nanostructured Sapphire Optical Fiber Imbedded with Gold Nanorods for Sensing in Harsh Environments

TIANCHI LIU
Metallic Nanostructured Functionalized Surface Modification
Yue Luo
Plasmonic Cavity Enhanced Single Photon Emission From Low-Dimensional Materials

Seyed Reza Mahmoodi
Understanding Fundamental Behavior of Thin, Flexible Micro Fuel Cells via Fabrication and Performance Characterization

Amir Mirbeik-Sabzevari
High-Resolution Millimeter-Wave Imaging for Tissue Diagnostics

Muhammad Mustafa
Krypton Tagging Velocimetry Investigation of High-Speed Flows

Nadira Najib
Functionalized Cellulose Nanofibrils Adsorbent for Removal of Arsenate and Phosphate Oxyanions From Aqueous Solution

Neil Pandya
Quantum Control Methods for Enhanced Coherent Anti-Stokes Raman Spectroscopy With Application to Remote Detection

Saumik Panja
Green Remediation of Pharmaceuticals and Nutrients from Secondary Wastewater Effluent
CHARLES V. SCHAEFER, JR. SCHOOL OF ENGINEERING AND SCIENCE

Majid Ramezani
Enhancement of Joining Method and Damage Detection Methodology in Structural Materials

Alexander N. Sedunov
Passive Acoustic Methods for Air and Maritime Border Security

Amin Shahverdi
Signal-to-Noise Ratio Enhancement via Mode Selective Frequency Conversion

Kamran Shayyan
Optical and Magnetic Manipulation of Solid-State Quantum Emitters

Michael J. Tamkutonis
Existence Theorems for the Safronov and Smoluchowski Coagulation Equations for Certain Fast-Growing Kernels

Jian Xu
Controlled Adhesion of Oil Droplets on PPy(DBS) Surfaces for Oil Absorption and Surface Regeneration
Sihang Xu
Mass Spectrometric Investigation of Structural Properties of Protomers of Some Small Molecules, and Identification of Defensive Allomones of Insects

Fan Yang
Long-Period Optical Fiber Gratings Enabled by Functional Polyelectrolyte Coatings for Multi-Parameter Sensing Applications

Siyang Yang
Chemical and Dynamic Heterogeneities in Interfacial Layers of Polymer Nanocomposites

Lun Yin
Modelling Spatio-Temporal Relationships with Deep Neural Networks to Estimate Coastal Water Levels

Chongfeng Zhang
Polyelectrolyte-Grafted Nanoparticles: From Self-Assembly in Solution Toward Evaporation-Induced Ordering

Min Zheng
Individualized Causal Model for Assisting Real World Decision Making
SCHOOL OF SYSTEMS AND ENTERPRISES

Saud Almahdi
Reinforcement Learning and Recurrent Reinforcement Learning for Dynamic Portfolio Optimization

Turki Alelyani
Framework for Design Factors in Software Crowdsourcing: Improving Performance of Competition-Based Crowdsourcing

Serkan Alkan
Complex Mutual Information-Theoretic Stock Networks

Ahmed B. Bahabry
Efficient UAV Fleet Operations for Smart City Applications: A Generic Navigation and Scheduling Framework

Jorge Rodriguez Buenfil
Application of Systems Engineering to the Architecture and Implementation of a Deep Learning-Based Security System for Automated Contraband Detection with Human in the Loop

Abbas Ehsanfar
Allocative Mechanisms and Information Exchange in Task Processing and Interactive Networks

Razieh Lotfalian Saremi
A Hybrid Simulation Model for Open Software Development Processes

Antonio Pugliese
Development of Spectral Structural Complexity Metrics in Cyber-Physical Systems
SCHOOL OF BUSINESS

JINHYOUNG KIM
Pricing, Hedging and Risk Assessment of Variable Annuities

SERHAN CEM KOTILOGLU
Essays on Organizational Risk Taking and Risk Management

SERGIO LUNA
Exploration of Public Sentiment as an Indicator of Public Response to Natural Disasters: An Analysis of Hurricane Scenarios

MEHRNOOSH OGHBAIE
Three Investigations to Aid Decision Making in Complex Systems

AMIN SALIGHEHDAR
Combining Distinct Measurements into a Comprehensive Indicator: A Study in High Frequency Finance and Climatology

MILOS TOPIC
The Role of Chief Information Officers in Driving Innovation Within Higher Education

SEBASTIAN TU Douglas
Volatility Models in Mathematical Finance: Solvable Diffusions, Transition Probability Kernels and Fractional Stochastic Processes
MASTER OF ENGINEERING (HONORIS CAUSA)
KISHORE POCHIRAJU
Associate Dean for Undergraduate Studies
and Professor, Mechanical Engineering
School of Engineering and Science

PROVOST’S AWARD FOR RESEARCH EXCELLENCE
HONGBIN LI
Professor, Electrical and Computer Engineering
School of Engineering and Science

PROVOST’S EARLY CAREER AWARD FOR RESEARCH EXCELLENCE
(co-recipients)
STEPHANIE LEE
Assistant Professor, Chemical Engineering and Materials Science
School of Engineering and Science
and
NICHOLAUSS PARZIALE
Assistant Professor, Mechanical Engineering
School of Engineering and Science

JESS H. DAVIS MEMORIAL AWARD FOR RESEARCH EXCELLENCE
ANTHONY PENNINO
Assistant Professor
College of Arts and Letters
FACULTY AWARDS

**HENRY MORTON DISTINGUISHED TEACHING PROFESSOR AWARD**

**KEVIN LU**
Teaching Professor, Electrical and Computer Engineering
School of Engineering and Science

**ALEXANDER CROMBIE HUMPHREYS DISTINGUISHED TEACHING ASSOCIATE PROFESSOR AWARD**

**EDUARDO BONELLI**
Teaching Associate Professor, Computer Science
School of Engineering and Science

**HARVEY N. DAVIS DISTINGUISHED TEACHING ASSISTANT PROFESSOR AWARD**

**LINDSEY CORMACK**
Assistant Professor
College of Arts and Letters

**PROVOST'S AWARD FOR EXCELLENCE IN ONLINE TEACHING**

**KEVIN RYAN**
Teaching Professor and Program Director of the Network and Communications Management Services
School of Business