1:00 - 1:20 PM  Oreoluwa J. Adesina  
Morgan State University  
Graphical User Interface (GUI) for MacroDFT and Parallel Computing  
Kaushik Bhattacharya  
Professor of Mechanics and Materials Science

1:20 - 1:40 PM  Kelly Y. Woo  
Robert J. McEliece and David Ratledge SURF Fellow  
Zinc Nanowire Substrate Fabrication for Glucose Detection Using Surface-Enhanced Raman Scattering (SERS)  
Hyuck Choo  
Assistant Professor of Electrical Engineering

1:40 - 2:00 PM  Ashwin Balakrishna  
Robert K. and Alice L. Roney SURF Fellow  
Optomechanical Modeling and Signal Processing for Analysis of Novel Implantable Interocular Pressure Sensor to Monitor Medical Condition of Glaucoma Patients  
Hyuck Choo  
Assistant Professor of Electrical Engineering

2:00 - 2:20 PM  Yuan Ma  
On-Demand Power Source for Medical Electronic Implants: Harvesting Energy From Acousto-Mechanical Vibrations of Human Vocal Cords  
Hyuck Choo  
Assistant Professor of Electrical Engineering

2:20 - 2:40 PM  Beiyi Wang  
William H. and Helen Lang SURF Fellow  
Energy Harvesting: Using Aluminum-Carbon Redox Batteries as a Readily Available Source  
Hyuck Choo  
Assistant Professor of Electrical Engineering

2:40 - 2:50 PM  BREAK

2:50 - 3:10 PM  Ali T. Sveinbjarnarson  
University of Iceland  
Caltech-University of Iceland Exchange  
A Computational Simulation and Analysis of Spinal Cord Stimulation Patterns  
Joel W. Burdick  
Richard L. and Dorothy M. Hayman Professor of Mechanical Engineering and Bioengineering  
Ellen Feldman  
Graduate Student in Control and Dynamical Systems

3:10 - 3:30 PM  Benjamin S. Morley  
University of Cambridge  
Caltech-Cambridge Exchange  
Stability of the Immersed Boundary Lattice Green’s Function Algorithm  
Tim E. Colonius  
Professor of Mechanical Engineering  
Sebastian Liska  
Graduate Student in Aeronautics

3:30 - 3:50 PM  Amal F. Tariq  
Margaret Leighton SURF Fellow  
Using Electromagnetic Integral Equation Solvers With Optimization Algorithms to Design 3D Antennas  
Ali A. Hajimiri  
Thomas G. Myers Professor of Electrical Engineering  
Constantine Sideris  
Graduate Student in Electrical Engineering
3:50 - 4:10 PM  **Zihan Liu**  
The Chinese University of Hong Kong  
Random Approach For Distributed Reed-Solomon Code Construction Using Balanced Column Sparsest MDS Code  
Babak Hassibi  
Professor of Electrical Engineering

4:10 - 4:30 PM  **Richard J. Antonello**  
Carolyn Ash SURF Fellow  
Lepidoptera Identification via Pose-Normalization and Convolutional Neural Networks  
Pietro Perona  
Allen E. Puckett Professor of Electrical Engineering  
Steve Branson  
Postdoctoral Scholar in Electrical Engineering