

2017 Electrical and Computer Engineering Technical Open House

Senior Project Expo Schedule

University Guest House

April 20, 2017

Demo 1: *Analog Interference Cancellation (AIC) for Simultaneous Transmit and Receive*

Fang He, Yang Qian, Spencer Orgill, Thomas Buhler, Zijian Wang (Jeffrey Walling)

Presentation Times: 12:00-12:50 & 3:50-4:40 (Students available: 12:00-1:30 & 3:30-5:00), Douglas East

Demo 2: *Interference of Power Line Harmonics with Pivot Irrigation Systems*

Brian Barkey, Krysta Rasmussen, Camille St. Louis, Frank Tsai (Masood Parvania)

Presentation Times: 12:00-12:40 & 3:50-4:30 (Students available: 12:00-1:00 & 3:00-5:00), Douglas West

Demo 3: *5-Axis High Resolution 3D Scanner*

Nathan S. Godfrey, Devin T. Renshaw, Kevin T. Whipps (Kam Leang, Pierre-Emmanuel Gaillardon, Jon Davies)

Presentation Times: 1:05-1:35 & 3:15-3:45 (Students available: 1:00-2:00 & 3:00-5:00), Douglas East

Demo 4: *Electric Aircraft Propulsion via Doubly Fed Induction Generators*

Logan G. Affleck (Marc Bodson)

Presentation Times: 12:00-12:10 & 2:30-2:40 (Student available: 12:00-3:00), Douglas West

Demo 5: *Electron Beam Characterization of Cadmium Telluride Solar Cells*

Dean A. Collett, (Heayoung P. Yoon)

Presentation Times: 12:15-12:25 & 2:45-2:55 (Student available: 12:00-3:00), Douglas West

Demo 6: *Development and Characterization of Tattooed Antennas*

Jordan Gluch (Cynthia Furse)

Presentation Times: 12:30-12:40 & 3:00-3:10 (Student available: 12:00-1:10 & 3:00-5:00), Douglas West

Demo 7: *Mobile ATX Power Supply Unit*

Alfred Neufeld (Arn Stolp, Jon Davies)

Presentation Times: 12:45-12:55 & 3:15-3:25 (Student available: 12:30-3:30), Douglas West

Demo 8: *Programmable Logic Controller Migration*

Laramie K. White (Angela Rasmussen)

Presentation Times: 1:00-1:10 & 3:30-3:40 (Student available: 1:00-4:00), Douglas West

Demo 9: *PLC Training/Testing Platform*

Thayne Roland Larsen (Angela Rasmussen)

Presentation Times: 12:00-12:10 & 3:50-4:40 (Student available: 12:00-1:00 & 3:00-5:00), Douglas East

Demo 10: *FDTD Simulation of Terrain Effects on Nuclear Electromagnetic Pulses*

Victor L. Taylor, (Jamesina Simpson)

Presentation Times: 12:15-12:25 & 4:10-4:20 (Student available: 12:00-1:00 & 3:00-5:00), Douglas East

Demo 11: *A Structural Health Monitoring System with Environmental Sensing*

Yisong Zhang (Joel B. Harley)

Presentation Times: 12:30-12:40 & 4:30-4:40 (Student available: 12:00-1:00 & 3:00-5:00), Douglas East

Demo 12: *Design and Implementation of a Video Coding Application on FPGA Using Advanced Logic Synthesis Techniques*

Gang Liu, Jacky Hu, Jason D. Blackburn (Pierre-Emmanuel Gaillardon)

Presentation Times: 12:45-1:15 & 3:15-3:45 (Students available: 12:30-1:30 & 3:00-5:00), Douglas East

Demo 13: *Planning Sustainable Energy Technologies for the University of Utah Campus*

Ben Lewis, Naveed Aghdassi, Hui Jing, Shreyas Choudhary, Richard Wiggins, (Masood Parvania)

Presentation Times: 1:15-2:15 & 3:00-4:00 (Students available: 1:00-4:00), Douglas West

Demo 14: *Analysis of J-V Curves in Nanoscopic Regions of Solar Cells & Integration and Control of a Liquid Nitrogen Delivery System*

Ruixiang An, Qijun Hou (Mike Scarpulla)

Presentation Times: 1:10-1:30 & 3:15-3:35 (Student available: 1:00-4:00), Douglas East

Demo 15: *System for Real-Time Measurement and Perturbation of Rodent 3D Arm Movements*

Jichen Zhang, Basel Habash, (Ross Walker)

Presentation Times: 2:00-2:20 & 2:50-3:10 (Students available: 2:00-5:00), Douglas East

Demo 16: *Parametric Array Speaker with Predistortion*

Trevor Hatch, John Loudenback (Ross Walker)

Presentation Times: 1:35-1:55 & 2:30-2:50 (Students available: 1:00-4:00), Douglas East

Demo 17: *Arduino Based Li-Fi (Light-Fidelity) Communication System for Home Automation*

Minseop.Kim, Nasser A Aljasser, Simon M.Luo (Angela Rasmussen)

Presentation Times: 1:00-1:30 & 2:00-2:30 (Students available: 1:00-4:00), Douglas West

Demo 18: *Skilled Nursing Center Electrical Design*

Jareth Smith, Chen Li (Jon Davies)

Presentation Times: 1:35-1:55 & 2:30-2:50 (Students available: 1:00-4:00), Douglas East

Demo 19: *Electric Vehicle Sensing and Power Transfer Measurement*

Kanglin Fu, Kevin Tran, (Alex Orange)

Presentation Times: 1:35-1:55 & 2:30-2:50 (Students available: 1:00-4:00), Douglas West

Demo 20: *Battery Pack Equalization Based On Battery Management System*

KE XU, ZiShuo Li (Angela Rasmussen, Jon Davies, Alex Orange)

Presentation Times: 2:00-2:20 & 4:00-4:20 (Students available: 2:00-5:00), Douglas East