

# 2008 SENIOR DESIGN PRESENTATIONS

## Civil Engineering Session 1, EC 325

- 1:45 – 2:10 p.m. **Gravity Water System for Nicaragua: Agua Para La Vida**  
Steffany Castro, Edward Reyes  
Advisors: S. Chiesa, E. Maurer
- 2:15 – 2:40 p.m. **Green Streets**  
Kristen Jackson  
Advisor: S. Chiesa
- 2:45 – 3:15 p.m. **Green Roof Design**  
Sara Doi, Kimberly Hoo, Ben Patriacca  
Advisor: E. Maurer
- 3:30 – 3:55 p.m. **Water Runoff Treatment at California's Great America**  
Lowell P. Esposito  
Advisor: S. Chiesa
- 4:00 – 4:25 p.m. **Acme Landfill Expansion**  
Alexandra Farros-Hoepfner, Patrick Grogan  
Advisor: S. Chiesa

## Civil Engineering Session 2, EC 326

- 1:45 – 2:10 p.m. **Steel Bridge 2008**  
Brandon Camilli, Michael Wackerman  
Advisor: M. Aschheim
- 2:15 – 2:40 p.m. **Foundation Re-Design for a High-Rise Structure**  
Gabriel J. Alcantar  
Advisor: S. Singh
- 2:45 – 3:10 p.m. **Design of a Two-Story Steel-Framed Shopping Center**  
Chiaming Chi, Seale Wong  
Advisor: H. Mu
- 3:25 – 3:50 p.m. **Plaster Shear Strength Design Values for Straw-Bale Wall Construction**  
Bryant Truong, Carla Villarreal Montes  
Advisors: M. Aschheim, S. Singh
- 3:55 – 4:25 p.m. **Habitat for Humanity**  
Laisa Alcala, Amy Swoboda, Madison Wood  
Advisors: M. Aschheim, H. Mu

## Computer Engineering, EC 618

- 2 – 2:25 p.m. **TOPCLASS Online Periodical Content Library and Submission System**  
Ross Dakin  
Advisor: R. Mikkilineni
- 2:30 – 2:55 p.m. **CheckOutMySeat.com**  
Matthew Lanham  
Advisor: D. Lewis
- 3 – 3:25 p.m. **Online Teaching Evaluations**  
Aaron Ramirez  
Advisor: T. Schwarz
- 3:40 – 4:05 p.m. **Secure E-Cash Transaction System**  
Anirudha Jadhav, Tirumala Panganamala  
Advisor: T. Schwarz
- 4:10 – 4:35 p.m. **NASA Small Spacecraft Command and Control Automation**  
James Reavis  
Advisor: C. Kitts

## Computer Engineering/Electrical Engineering, EC 602

- 1:45 – 2:10 p.m. **Blue Wireless Communication**  
Okechukwu Mbanugo, Timothy Monzures  
Advisor: S. Wilson
- 2:15 – 2:45 p.m. **A UHPVD Process Design for Fabrication of Pentacene/Fullerene Heterostructure Solar Cell**  
Ammone Chapackdee, Jovi Gacusan, Milad Mohammadnejad  
Advisor: M. Rahman
- 2:50 – 3:20 p.m. **HappyHome**  
Yesenia Herrera, Chris Iwamura, Kimberly So, Evan Uyehara  
Advisors: S. Krishnan, D. Lewis
- 3:35 – 4:05 p.m. **Image Capture System for OBSIDIAN's Biological Payload**  
Joseph Hotchkiss, Christian Ochoa, Rafferty Saturno, Allen Yeung  
Advisor: C. Kitts
- 4:10 – 4:35 p.m. **Pulse Transformer Design**  
Kristine Runge  
Advisor: S. Krishnan

## Electrical Engineering, Learning Commons and Library Viewing and Taping B, Room 133

- 1:45 – 2:15 p.m. **BMW Door Mechatronics Project**  
Alfonso Chartier, Calvin Hwung, Julian Lupu  
Advisor: C. Kitts
- 2:20 – 2:45 p.m. **Agilent Millimeter Wave Imaging System (AMWIS)**  
Landon Reese, Ryan Schulz  
Advisor: S. Wilson
- 2:50 – 3:15 p.m. **Air Guitar**  
Jeremy Lim, Scott Otake  
Advisor: S. Wilson
- 3:30 – 4 p.m. **LED Driver Utilizing iWatt, Inc., Power IC**  
Curtis J. Davis, Juliana Khan, Laya Yadgar  
Advisor: S. Krishnan
- 4:05 – 4:35 p.m. **DAN – Digital Audio Needle**  
Susie Zheng, Brian Drocco, David Njuguna  
Advisor: S. Wilson

## Mechanical Engineering, Learning Commons and Library Viewing and Taping A, Room 129

- 2 – 2:30 p.m. **Personal At-Home Fruit Picker**  
Andrew Georgette, Nora Hendrickson,  
Dave Merselis, Gene Velasquez  
Advisor: T. Hight
- 2:35 – 3:10 p.m. **Formula SAE**  
Anthony Le, Gregory “Chase” Luckey, Zac Rubenson,  
Andrew Valmonte, Erik Ostlund  
Advisor: D. Fabris
- 3:25 – 3:55 p.m. **CO<sub>2</sub> Sequester for a Biogas Plant**  
Arturo Alvarez, Carlos Barrera, Oscar Lopez  
Advisor: J. Gonzalez
- 4 – 4:25 p.m. **Autonomous SWATH Boat**  
Todd Berk, Andrew Casanova  
Advisor: C. Kitts

## Interdisciplinary Session 1, Learning Commons and Library Training and Instruction 1, Room 203

- 2 – 2:30 p.m. **Roverwrx: Urban Search and Rescue Robot**  
Matt Ambauen, Casey Kute, Ben Sobczak  
Advisor: C. Kitts
- 2:35 – 3:10 p.m. **Disaster Response “Eye in the Sky”**  
Senthil Chidambaram, Isaac George,  
Matthew Illowsky, Michael A. Rosshirt  
Advisor: C. Kitts
- 3:25 – 3:55 p.m. **VES – Ocular Medical Detection Device**  
Chris Cardenas, Tommy Jewell, Lorrie Ma,  
Tuan Nguyen  
Advisors: T. Hight, S. Krishnan
- 4 – 4:35 p.m. **SkyPods**  
Randall Haraguchi, Chris Ho, Martin Jordan,  
Matthew Rechenmacher, Christian Perez Villalobos,  
Chengkai Yang  
Advisor: D. Siljak

## Interdisciplinary Session 2, Learning Commons and Library Training and Instruction 2, Room 205

- 2 – 2:30 p.m. **Carbon Nanotube/Pyrene Hybrid Nitric Oxide Sensor**  
Agustin Fonts, Sarah Hanna, Christopher Villongco  
Advisor: S. Krishnan
- 2:35 – 3:10 p.m. **EWB Water Purification for Karheda, India**  
Joseph Capoccia, Alberto Fonts, Ryan Harami,  
Yasemin Kimyacioglu, Daniel Stadulis  
Advisors: T. Hight, S. Krishnan
- 3:25 – 3:55 p.m. **AutoNav**  
James DeMuth, Garrett Fitzgerald, Kyle Loving  
Advisor: C. Kitts
- 4 – 4:35 p.m. **Solar Installation Project (SiP)**  
Brian Albright, Frank Altamura, James Bickford,  
Anthony Ferreira, Raymond Lam, Ryan Leary  
Advisors: M. Aschheim, T. Hight, C. Kitts