“Senior Capstone Projects represent the culmination of the educational experience, integrating the classroom with real world problems. The students handle open ended engineering and Computational problems whose solutions require a synthesis of engineering knowledge, computational analysis, creativity, market needs, safety and esthetics. Projects are carried out by students and supervised by instructors and industry mentors.”

Panel of Judges
Representatives from Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, Computer Science and Industrial Advisory Board members.

Supervising Faculty (Civil, Electrical, Mechanical and Computer Science and Information Technology)

Ahmet Zeytinci, Professor, Civil Engineering
Pradeep Behera, Professor and Chair, Civil Engineering
Inder Bhambri, Professor, Civil Engineering
Esther O sosanya, Professor, Electrical and Computer Engineering
Abiose Adebayo, Professor and Chair, Mechanical Engineering
Jiajun Xu, Assistant Professor, Mechanical Engineering
Lara Thompson, Assistant Professor, Mechanical Engineering
Pawan Tyagi, Assistant Professor, Mechanical Engineering
Devas Shetty, Professor and Dean, SEAS
Samuel Lakeou, Prof. and Chair, Electrical and Computer Engineering
Lily Liang, Professor and Chair, Computer Science
Dong Jeong, Assistant Professor, Computer Science

Acknowledgements

UDC Experimental Res. Center
WMATA
Hung Ha
DOE-NNSA (Dept. of Energy-National Nuclear Security Agency)

NSF
STEM Center
Gebretensae Tzadu
DC Government Agencies
DCWRRI
SENIOR CAPSTONE PROJECT PRESENTATIONS
School of Engineering and Applied Sciences, UDC
Civil, Electrical and Mechanical Engineering, April 28, 2016, 10:00 AM to 4:00 PM, 42/A09
Computer Science and Information Technology, April 22 and 29, 11 AM- 2 PM, 42/114B

April 28, Thursday

**Civil Engineering**

Civil Engineering System Analysis and Design

**Electrical and Computer Engineering**

Automatic Drip Irrigation System
Samuel Boateng, Mohamed Alshaer, Mohammed Zakri and Rida Babikir
*Interest: UDC Agricultural Experimental Research Station*

Surface Roughness Measurement
Dylan Magowan and Hung D. Vo.

**Mechanical Engineering**

Design of a Dopamine Biosensor
Beachrhell Jacques, Edward Friebe
*Sponsor/External Interest: National Science Foundation*

3D Printing Prosthetic Limb Design
Charles Wilson, Denikka Brent, Collin Baker
*Sponsor/External Interest: National Science Foundation*

WMATA Escalator Handrail Belt and Bearing Analysis and Redesign
Steven Cale, Pat Jucelin Djandjo
*Sponsor/External Interest: WMATA*

Design and Implementation of a Portable Rainwater Collection & Storage System
Musa Acar, Erika Spangler
*Sponsor/Interest: DCWRRI*

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April 22, Friday

**Computer Science and Information Technology**

Designing a Web-Based Restaurant Food Ordering System
Meseret B. Meressa, Mekonnen L. Senbeta

DogLovers iOS mobile application
Peerada Loaareesuswan

Designing A Website For Yard Vybz Jamaican Restaurant
Shaneika A. Rose

Designing and Implementing an iOS Application for Improving Statistical Literacy in Adults
Michael T. Benton, Oji S. Ofong

Musical Content Management System
Goldie A. Brown

Making a Case for Web Services in Your Profession
Zakariy X. Mills

April 29, Friday

Comparing three Content Management Systems by designing simple websites
Blen K. Gamini

Developing A Recycling Mobile Application With Android
Rashaad D. Patterson, Mohammed Alkashami, Meshal S. Almutairi

Camsa (Celebration Automated Message Sender Application)
Haitham Mehasin M. Allehiany, Zaid H. Alanazi, Mohammed Alaassi K. Alhathal, Abdel-Razak Amadou, Raed Alqarni

Hosting Plan Analyzer
Abdullah Almatar, Ibrahim Khalil Alhumaidi, Faisal Alhazzani

DCPS/OCTO Introduce ASPEN
Eric D. Gray

Pills Management App
Alexander A. Herron

A Cloud Based Reliability Study for Business Enterprises
Cameron A. Sherr, Manoj Subedi