Department of Electrical Engineering and Computer Science
Howard University

EECE401 Senior Design I: **Solution Design Presentation**

1:10 – 3:30pm. Monday November 19, 2018

Room 3121 L. K. Downing Hall (Engineering Building)

1:10 - 1:20 pm: Welcome and introduction (Dr. Charles Kim)

1:20 – 1:40pm Terminator

- Project Title: Terminator
- Team Members: Charles Robinson (EE), Marcus Ragland (EE), Owns Vil (EE)
- Others: T K Chibuike (ME)
- Advisor: Dr. Charles Kim
- Project Goal: Develop a robot which enables to recognize tic-tac-toe board and to play against human.

1:40 – 2:00pm eTrike

- Project Title: eTrike
- Team Members: India Burse (CpE), Ayana Walker (EE), Tramia Johnson (CpE), Akinyemi Morakinyo (EE)
- Others: Terron Rose (CpE)
- Advisor: Dr. Mamadou Wade
- Project Goal: Make the E-TRIKE more space efficient, and include a feature to make it solar powered.

2:00 – 2:20pm Graphone

- Project Title: Graphene Microphone
- Team Members: Sheriff Adewumi (EE), Harrell Tolentino (CpE), Rodney Edge (EE)
- Others: Ayush Giri (ME), Fikunwa Kolawole (ME), Jordan Fraser (ME)
- Advisor: Dr. Hyung Bae
- Project Goal: We must research first the constructs of PCBs and come up with ideas to implement the graphone in a way to so it can be attached to the PCB without any problems.

2:20 – 2:40 pm Integrated Sensor Squad

- Project Title: Sandia
- Team Members: Nadine-Marie Bell (EE), Michelle Chastang (CpE), Hakeem Thomas (EE), Stephen Young (EE)
- Others: Jantelle Francis (ME), Saka Paudel (ME), Matthew Sheppard (ME), Bibek Ramdam (ME)
- Advisor: Dr. Grant Warner
- Project Goal: Design an integrated sensor device using a microprocessor to sense environmental conditions.

2:40 – 3:00pm SLAM

- Project Title: FGPA-Based SLAM (Solving Localization And Mapping problem between autonomous platforms)
- Team Members: Cameron Lewis (CpE), Morganne Veal (EE), Clifford Peeples (CpE), Jarrett Cunningham (CpE)
- Others: Eric Cooper (ME), Dorian Reid (ME), David Hudson (ME)
- Advisor: Dr. Michaela Amoo
- Project Goal: Design and build a COTS based autonomous wheeled platform with Bang Bang control, PID controller, and sensor arrays (IR Rangers, Scanless Lidars), using DSPACE and HIL (hardware in the loop).

3:00 – 3:20pm AutoMoe

- Project Title: Autonomous Vehicle
- Team Members: Satchin Campbell (CpE), Samantha-Jo Cunningham (EE), Pawan Gaire (EE), Savannah McCoy (CpE)
- Others: Kuishon Brown (ME), Mueizdeen Ajiborode (ME)
- Advisor: Dr. Danda Rawat
- Project Goal: Design and build two autonomous car prototypes capable of privacy aware inter-communication.

EE: Electrical Engineering, **CpE**: Computer Engineering, **ME**: Mechanical Engineering