

Department of Electrical Engineering and Computer Science



**Electrical Engineering and Computer Science Day
Friday, April 15, 2022**

**At
Howard University
INNOVATION CENTER
Mackey Building, 2336 Sixth Street, Northwest
Washington, DC 20059**



Schedule of Activities

8:30 am – 9:00 am **Registration and Breakfast**

9:00 am – 9:15 am **Welcome and Overview**
Dr. John Anderson, Dean
College of Engineering and Architecture

9:15 am – 11:45 am **Senior Design Presentations**

Session 1: Innovation Center – Computer Science Projects

9:15 am – 9:30 am **Team 1:**
Project Title:
Faculty Advisor:
Team Member(s):

- **Project Goal:**
- **Problem Statement:**

9:30 am – 9:45 am **Team 2:**
Project Title:
Faculty Advisor:
Team Member(s):

- **Project Goal:**
- **Problem Statement:**

• 9:45 am – 10:00 am **Team 3:**
Project Title:
Faculty Advisor:
Team Member(s):

- **Project Goal:**
- **Problem Statement:**

10:00 am – 10:15 am **Team 4:**
Project Title:
Faculty Advisor:
Team Member(s):

- **Project Goal:**
- **Problem Statement:**

10:15 am – 10:30 am **Team 5:**
Project Title:
Faculty Advisor:
Team Member(s):

- **Project Goal:**
- **Problem Statement:**

10:30 am – 10:45 am

Team 6:
Project Title:
Faculty Advisor:
Team Member(s):

- **Project Goal:**
- **Problem Statement:**

Session 2: Innovation Center – Electrical and Computer Engineering Projects

9:15 am – 9:30 am

Team 1: Aerospace One

Project Title: Solar Powered Remote Control Vehicle

Mentor/Advisor: Dr. Ahmed Rubaai/Casey Jones (Aerospace)

Team Member(s): Tyler Borderon (CpE), DeAndra Gayle (CpE), Dymier Steele (CpE), and Essien Taylor (CpE)

Project Goal: Develop a solar powered remote control car built from the ground up and demonstrate the real time telemetry results and WIFI control

Problem Statement: The need of Aerospace in the current situation of finding a way to monitor and record the telemetry of systems, observe and improve upon the efficiency of engines and power conversion, and control the remote controlled car with low latency is to provide a means that keeps track of the system's health, provides an efficient engine and power conversion, and controls the car with low latency.

9:30 am – 9:45 am

Team 2: Capital Creators

Project Title: Algorithmic and Visualization Capabilities for Machine Learning

Mentor/Advisor: Dr. Imtiaz Ahmed

Team Member(s): Caelia Thomas (EE), Joshua Whitaker (CpE), De'Johnna Wright (CPE)

Project Goal: Drift detection in big data

Problem Statement: The need for the Capital One team is to increase efficiency in processing data sets, effectively visualize data for in depth analysis and reduce the error rate by using machine learning algorithms.

9:45 am – 10:00 am

Team 3: Deliveroid

Project Title: Delivery Robot

Mentor/Advisor: Dr. Charles Kim

Team Member(s): Michael Vaughan (CpE), Forzando Mebane (EE), Williams Obidke (EE), and Aquila Bamigbade (ME)

Project Goal: Development of a delivery robot

Problem Statement: Burden of getting up from your desk to transfer documents has developed the need to create a robot that will autonomously transfer said documents so that users will not get disturbed from their work.

10:00 am – 10:15 am

Team 4:

Project Title: Memory Forensics

Mentor/Advisor: Dr. Hassan Salmani

Team Member(s): Davia McKenzie (CpE), Patience Jato (EE), Roli Bolorunfe (CpE), and Chiadikaobi Oguh (CpE)

Project Goal: Define and develop the too requirements and capability comparison of memory forensic tools

Problem Statement: Since commonly known attack methods have been increasingly sophisticated, there is a need to create a secure operational environment by identifying the common known attack methods and identifying the best method of the memory forensic tools for the physical memory coverage through comparison and contrast.

12:00 pm – 1:00 pm

Lunch

1:00 pm – 1:45 pm

Remarks and Introduction of the Keynote Speaker

1:45 pm – 2:15 pm

DEMO/POSTER PRESENTATION

2:15 pm – 3:00 pm

Awards

3:00 pm

Adjourn