

2024 iRACE Hackathon

“Combat Counterfeits with Contactless IoT for Authenticity and Loyalty”

HACKATHON SCHEDULE:

	When	What	Where
Info Meeting	March 25, 12:00-12:50 p.m.	Hackathon Information Meeting	Library 3129
Hackathon Day 1	April 1, 12:00-1:00 p.m.	Learn about NFC technology	Library 3129
Hackathon Day 2	April 8, 12:00-1:00 p.m.	Explore existing use cases	Library 3129
Hackathon Day 3	April 22, 12:00-1:00 p.m.	Present your hack	Zoom

OBJECTIVE: To propose a creative use case for **NFC technology** as a contactless IoT tool for authentication to combat counterfeits and build brand loyalty for a selected product brand.

ELIGIBILITY: EITHER you are enrolled in the iRACE course (CADS 3300/8970) OR you meet ALL of the following criteria:

- You are an undergraduate student majoring in *Apparel Merchandising, Design and Production Management (AMDP)*
- You will graduate in May 2025 or later.
- You will attend ALL of the four hackathon sessions as scheduled above.

PROCEDURE:

1. Form a team of 3 students and inform Dr. Kwon (kwonwis@auburn.edu) of the **team name** and the **names of the members** by the information meeting on March 25th (Monday).

A total of nine teams will compete in the hackathon, including seven teams enrolled in CADS 3300/8970 and two teams not enrolled in CADS 3300/8900 in Spring 2024. **If more than two non-CADS 3300/8970 teams apply, the CADS Department Head and the iRACE Initiative Director (Dr. Kwon) will select two of the applied teams** to enter the Hackathon based on the team members' 1) GPAs, 2) class standings, and 3) experiences. Dr. Kwon will notify those selected before the March 25 information meeting.

2. **Once your participation in the Hackathon is confirmed by Dr. Kwon, attend the Information Meeting and both Day 1 and Day 2 sessions in Library 3129, as specified above.**
3. Based on what you learned about NFC on Day 1 and Day 2 of the Hackathon, each team identifies a potential **use case** for NFC where an NFC label/tag is employed **to digitally verify that a product is authentic (meaning it is original to the brand, not a counterfeit product)**. In addition to product authentication, the use case also should include what else the brand can have available to the consumer/user through the NFC label **to promote a customer-brand relationship and customer loyalty**.

4. For the identified use case, **design a sample digital asset** (e.g., a mobile site/app, a website, a multimedia file, a digital document) to which the NFC label will direct the user when the user's smartphone reads the label.
 - If you want the NFC label/tag to direct the user to a webpage, you may want to create a sample webpage by using any free website builder application (e.g., Wix, WordPress, Adobe Spark).
 - If you want to link the NFC to a multimedia file (e.g., video), you may upload it on YouTube.
 - You may create any other forms of digital asset as long as it is accessible via the Internet.
5. **Encode blank NFC labels** (provided in the Hackathon Technology Kit on Day 1) with the URL to the digital asset that you created.
 - See NEXT PAGE for **NFC encoding instructions**.
 - Also, a video tutorial of NFC label encoding process can be found at <https://www.youtube.com/watch?v=kkU2LFhmZCI>

 **CELLOTAPE™** *NFC Encoding Instructions*
A RESOURCE LABEL GROUP CO.

Android / Microsoft / Google / Blackberry

**NFC reader located in the back (various locations)
Requires NFC enabling in settings*

- Step 1: Open NXP Tagwriter App.
- Step 2: Select 'Write Tag'
- Step 3: Select 'New dataset'
- Step 4: Select 'Link'
- Step 5: Choose URI type
- Step 6: Enter URI data
- Step 7: Save and write
- Step 8: Hold phone over NFC tag
- Step 9: Tap to confirm
- Step 10: Write successful



iPhone 7 or later

**NFC reader located at the top edge of the iPhone*

- Step 1: Open NXP Tagwriter App.
- Step 2: Select 'New'
- Step 3: Select 'Link'
- Step 4: Choose your URI type
- Step 5: Enter URI data
- Step 6: Save and write x2
- Step 7: Hold phone over the NFC tag to encode.
- Step 8: Encoding confirmed with a checkmark



6. In the Hackathon Day 3 session (**April 22th**), give a **3-minute team presentation** (with PowerPoint slides). Include in the presentation:
- **Title Slide (Slide 1)**: Use case title, team name, and names of the team members
 - **Slide 2**: Use Case Description (Which brand and which product is NFC going to be implemented? How will NFC be embedded in the product? Who are intended users/consumers of the product? How will the authentication happen? What else besides the authentication does NFC do to build customer-brand relationships or enhance customer loyalty?)
 - **Slide 3**: Demo of the NFC label use – You may use whatever approach that you think is best to demonstrate how the NFC label is used for your use case (e.g., a demo video, pictures, a live demo)
 - **Slide 4**: Value/Usefulness (i.e., How this use case can benefit the brand and the user/consumer).

EVALUATION:

A panel of judges consisting of industry experts will score each team using the following **judging criteria**:

- **Creativity (5 points)**
- **Innovativeness (5 points)**
- **Value/Usefulness (5 points)**
- **Tie Breaker: Wow factor (5 points)**

WHAT IF MY TEAM WINS

- ❖ The team that receives the highest score from the industry judges will be the winning team. If more than one teams tie with the highest score, the team that received a higher score on the “Wow Factor” will win.
- ❖ The winning team and the runner-up team will receive certificates of achievement.
- ❖ In addition, **each member of the 2024 iRACE Hackathon winning team will receive a \$1,000 travel scholarship** to attend the 2025 National Retail Federation (NRF) Student Program in New York in January 2025, or an equivalent scholarship if the winner is a senior graduating before January 2025.