Student Collaborations and The Museum of The Future
Presenters

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Our Case Study

- Today we’re presenting the results of an ongoing program at The College of New Jersey (TCNJ) where students in the Department of Interactive Multimedia (IMM) are partnering with regional museums to develop interactive exhibit prototypes.
- The program is in its 3rd year, and has successfully produced over a dozen interactive exhibits.
- Many of these exhibits have been integrated into the permanent collections of our partner museums.
- The program consists of an exhibit design class in fall, with an optional public Student Showcase the following semester.
Some Benefits We’ve Observed to Date

- Partner museums are able to inexpensively explore new approaches to interpreting their collections, with the option of developing the best solutions further
- Partner museums are able to develop a new talent pool from which they can hire
- Partner museums gain new forms of community engagement and extend their educational outreach
- Students gain hands-on experience working with museum collections and creating interactive exhibits with emerging technologies
- Students become familiar with the functions and processes of real-world design studios
- The community gains increased knowledge and awareness of the partner museum, their collections, and the university
How it works - The Museum

Museum personnel have several points of contact with students over the course of the semester including:

- Twice at the beginning of the semester to present the museum’s background, collection management practices, and collection interpretation information
- Again toward the middle of the semester to review project concepts and supervise the inspection of specific object files related to each project
- And again at the end of the semester to observe final prototype demonstrations

Museum personnel can also monitor and provide feedback on projects throughout the semester by visiting project pages on the class blog.
How it Works - The Students

Students pursue two tracks of study concurrently through the 1st half of the semester:

- They meet with museum personnel to learn more about the museum, its collection management practices, the object files, and the exhibit space
- They survey emerging technologies and their use in museum settings

After mid-terms, students form teams and iteratively develop their prototypes, with regular feedback from museum personnel, classmates, the instructor and advisors.
How it Works - Field Trips and Guest Speakers

Students gain additional insights through 2 field trips:

- One to a regional art museum
- One to a regional science or children’s museum

Local exhibit design professionals are also invited to discuss practical, real-world considerations when working with specific technologies and techniques.
More About IMM

- IMM is an undergraduate program within the School of Arts and Communication at The College of New Jersey
- We currently have 140 students enrolled in the program
- Students receive foundational training in digital media, interactive computing, writing, and web & mobile design
- Students can choose to pursue advanced training in animation, game design, web & mobile app development, physical computing, and interactive music
- The program culminates in a senior capstone project
1st Iteration - TCNJ’s Sarnoff Collection

- The Sarnoff Collection is named in honor of David Sarnoff, longtime chairman of the Radio Corporation of America (RCA) and internationally renowned pioneer in radio and television.
- The Collection comprises over 6,000 artifacts that document major developments in communication and electronics in the 20th century.
- When the Sarnoff Collection was transferred to The College of New Jersey, it was completely undocumented and uncatalogued.
- In 2013, the College opened a new exhibition with no interactive media.
- The Sarnoff Collection and exhibition was under-researched and underfunded.
1st Iteration Results

- The results of the inaugural class were impressive, and a Student Showcase was planned to exhibit the work in the Sarnoff Museum the following semester in February.
- Of the original 8 projects developed in the class, 7 participated in the showcase.
- Of those that participated in the showcase, 4 were contracted to further develop their projects for inclusion in the permanent Sarnoff Collection.
RCA: How a Company Became an Industry

RCA introduces black and white TV during the 1939 World Fair

RCA introduces their black and white televisions to the world at the New York World’s Fair. Though television has already been established in Europe, RCA hopes to introduce the device to the US on a broad scale. Unfortunately the second World War breaks out before RCA can really push the project.

From: http://phenomenschuggermusic.blogspot.com/2010/07/worlds-fairmemorabilia.html
One of the advertisements for the 1939 World’s Fair

Al Gaillard, Erin McGowan, & Briana Wickham, Interactive timelines of RCA History, 2013 (timeline.js)
Daniel Shaw, augmented reality photographs, 2013
(Aurasma + Adobe Photoshop)
Nicholas Bobryk & Brian Passafaro, Reconstructing the First RCA Color Television Tube, video and game, 2013

Video (Adobe Photoshop + Adobe After Effects)
Game (Processing)
Matthew Mance, Augmented Reality Television, 2013
(Metaio + Youtube)
2nd Iteration - The Sarnoff Collection

- Following the success of the 1st offering of the Interactive Exhibit Design class, the course was offered again in Fall 2014, partnering once again with TCNJ’s Sarnoff Collection.
- The course was updated to reflect advancing technologies and techniques, and some collection items were deemphasized to avoid redundancy of effort from the previous year’s course.
2nd Iteration Results

- Once again, students were able to produce prototypes of high enough quality to warrant a student showcase.
- Of 7 projects, 5 participated in the Interactive Exhibit Expo in February 2015.
Michael Albert, Sarnoff Oculus Tour, 2014
(Oculus Rift + Unity 3D)
Dalton Ackerman, Adam Czaplnski, and Tom Verga, Sarnoff Exhibit iBeacon Tour (Phonegap + Estimotes)
There are billions of electrons sleeping soundly

Joseph Szalecki, RCA Film Reel Restoration, video animation, 2014
(Hand Drawings + Adobe Premiere)
Rebecca Leader & Jonathon Sofo
Color TV Phosphors, interactive color video display, 2014

Controller (Arduino + Processing)
Video (Adobe Premiere)
This year we’re partnering with the New Jersey State Museum, where students are developing prototypes for the *Pretty Big Things* and *Civil War Flags* exhibits.
3rd Iteration Results

- So far so good - we’re on target with students having successfully completed the 1st half of the semester.
- One observation is that there are a total of 12 prototypes this semester, contrasted with 8 and 7 the previous two years, respectively.
- This could be the result of more students in the class; 16 this semester vs 13 in Fall 2013 and 12 in Fall 2014.
- It could also be a reflection of the size of the collection at the New Jersey State Museum vs The Sarnoff Collection.
That’s Our Case Study, Thank You!
Questions, Contacts & Course Syllabi

Contacts

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Course Syllabi

● Fall 2015 - http://imm.mediamesis.net/imm470fall2015/
● Fall 2013 - http://memex.immtcnj.com/imm37001fall2013/