

Creating a Cross-Departmental Degree Program

NSF ATE PI Conference Presentation 2020

Strengthening Mobile Application Resources and Technician Training (SMARTT)

Principal Investigators: Jon Lundquist and Peter Carswell

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## Creating a Cross-Departmental Degree Program

**Submitting ATE Project Grant Number:** 1700519

**Submitting ATE Project Grant Title:** Strengthening Mobile Application Resources and Technician Training

**Session Track:** Track 1 - Demonstrating Resilience & Establishing New Frontiers

**Session Format:** Spotlight Session

### **Presenter 1 Information:**

Jon Lundquist  
Professor, Department of Art, Media, & Design  
Columbus State Community College  
550 E. Spring St.  
Columbus, OH 43215  
614-287-5647  
[jlundqui@csc.edu](mailto:jlundqui@csc.edu)

### **Presenter 1 Bio (max 500 characters):**

*Provide a brief statement on the presenter's background and expertise on the concepts or tools they are presenting.*

### **Presenter 2 Info:**

Peter Carswell  
Associate Professor, Information Systems Technology  
Columbus State Community College  
550 E. Spring St.  
Columbus, OH 43215  
614-287-5173  
[pcarswel@csc.edu](mailto:pcarswel@csc.edu)

### **Presenter 2 Bio:**

### **Presenter 3 Info (Spotlight sessions only):**

Stephanie Schuler (Session Facilitator)  
IT Project Manager, Grants Office  
Columbus State Community College  
550 E. Spring St.  
Columbus, OH 43215

614-287-3867  
[sschuler1@csc.edu](mailto:sschuler1@csc.edu)

### **Presenter 3 Bio:**

Stephanie Schuler oversees the information technology portfolio for NSF grants. Stephanie earned her bachelor's in education from the University of Toledo and her master's in educational leadership from the University of South Florida. Previously, Stephanie worked as a project manager for a school software company. She also has over 10 years of experience as an educator and school administrator.

**Session Title:** Creating a Cross-Departmental Degree Program

### **Program Abstract: (max 600 characters):**

*Please describe this session by telling attendees what to expect, what they will learn, and how the session will engage participants. This abstract will be posted to the conference website and virtual event platform as part of the event program.*

Standing up a new degree program is a big undertaking, especially when it involves more than one department. Learn how a partnership between the Art, Media, & Design and Information Systems Technology departments at Columbus State Community College is producing a new associate degree program in mobile app design and development. Collaboration is a key component throughout the project and program, mimicking industry work environments. We'll share lessons learned and ideas for replication.

### **Session Outline:**

*Submit an outline that includes a session agenda, 2-3 participant learning outcomes, 2-3 discussion questions if submitting a Spotlight or a Synergy Session, and a short list of any resources or materials that could be linked for distribution. Keep in mind that Spotlight and Synergy sessions are 50 minutes in length, and Demonstrations are 30 minutes in length. Please include an outline for how that time will be allotted.*

#### Agenda:

- Introduction: Presenters and their roles (5 min.)
- About the SMARTT project (5 min.)
- Building and maintaining true partnerships between departments (15 min.)
- Fostering cross-departmental student collaboration (15 min.)
- Lessons learned (5 min.)
- Q&A (5 min.)

#### Learning Outcomes:

- Recognize benefits and challenges of cross-departmental partnerships
- Identify ideas for replicating collaborative model

#### Discussion Questions:

- How can you maintain an equal partnership?
- What are some approaches for fostering cross-departmental student collaboration?

#### Resources:

- Mobile device lab white paper

**Session Scheduling:**

*Sessions will be scheduled to occur on the dates and time frames listed below. Please rank your session scheduling preference with 1 as your first preference, 2 as your second, etc. Note that AACC will try to accommodate scheduling preferences but cannot guarantee them when placing sessions on the conference agenda.*

[#] Wednesday, October 21, between noon and 4 p.m. EST

[#] Thursday, October 22, between noon and 4 p.m. EST

[#] Friday, October 23, between 1 and 3 p.m. EST

# Creating a Cross-Departmental Degree Program

Standing up a new degree program is a big undertaking, especially when it involves more than one department. Learn how a partnership between the Art, Media, & Design and Information Systems Technology departments at Columbus State Community College is producing a new associate degree program in mobile app design and development. Collaboration is a key component throughout the project and program, mimicking industry work environments. We'll share lessons learned and ideas for replication.

## Presenters:

- **Moderator:** Stephanie Schuler, Project Manager, Grants Office
- **Panelist:** Jon Lundquist, Professor, Department of Art, Media, & Design
- **Panelist:** Peter Carswell, Associate Professor, Information Systems Technology

## Learning Outcomes:

- Recognize benefits and challenges of cross-departmental partnerships
- Identify ideas for replicating collaborative model

## Setup:

- Zoom
- Background Images from NSF (not working with processor)

## PowerPoint:

- Welcome slide
- Any visuals they want to reference in their responses:
  - Bubble charts
  - Mobile Lab Photo
- Contact Info

## Session Outline (50 min.):

- **Welcome – (5 min)**
  - Columbus State Community College from Columbus Ohio
  - Reference the live chat for questions and conversation
  - PowerPoint References: Bio Slide
  - Introductions:
    - Jon: name, title, brief description of role at the college
    - Pete: name, title, brief description of role at the college
    - Stephanie: name, title, brief description of role at the college, overview of IT grants and identify the SMARTT grant.

- **Questions 1 – Give us a brief history of the project. (10 minutes)**
  - o PowerPoint References: None
  - o Jon
    - Mobile App Design certificate concept in 2013– start of five courses  
several industry partners interested in these skillsets from IMM students
    - Began talks with Chair and Grants department in 2014 (grants dept served as a bridge to bringing the two programs together)
    - Created new Hybrid app course with Zak D. (Adobe PhoneGap)
    - Unknown what was happening with Computer Science
    - Began flushing out concepts for five courses:
      - Accessibility ADA issues with UX/UI
      - Mobile Analytics
      - Software for prototyping (XD, Sketch, Invision)
      - Project Management
      - Mobile coding for designers
    - Began running Hybrid App course Au 2015 with low enrollment
    - Did not run the five courses for certificate
    - Departments come together late 2014/early 2015
  - o Pete
    - Jorge Vallejos and I conducted Advisory Panel for CS in 2014
    - One outcome was to refresh the curriculum with current technologies
      - Mobile Apps was suggested
    - Started to investigate the Mobile App community
      - Attended MeetUps and Workshops
    - Focused on two platforms, iOS and Android
    - Consulted with two developers
      - Arthur Neuman, Android developer
      - Matt Sheets, iOS developer
    - Four courses were developed
      - Fundamentals for Android
        - o Featuring Java
      - Projects for Android
        - o Team environment
        - o Teams develop projects
      - Fundamentals for iOS
        - o Xcode and playgrounds
        - o Then newly released Swift
    - Unable to run the courses continuously as Program had not been ratified
- **Question 2 – How do you maintain equal representation of both degree paths? (3-5 mins.)**
  - o Jon
    - Separate areas (design and development) but like minds – we knew that each needed the opposite skillsets
    - Each serve as a lead
  - o Pete



- Essential that both programs activate at the same time
    - CS degree relies on courses in the Design program
      - o Unable to schedule courses not in an activated program
- **Question 6 – What advice would you go to those starting a similar experience? (8-10 consider time remaining)**
  - o Jon
    - Be prepared for many meetings and rational statements
    - Don't be afraid to cold call businesses
    - Find the right data to support your direction
    - Have a good Coordinator to support your goals
  - o Pete
    - Faculty should foster intradepartmental communication
    - Communicate frequently (Standing meetings, informal communication (coffee, lunch))
    - Discuss projects that might lead to grant support
      - Important to have an experienced grant team
      - The grant process is intricate!
    - Keeping a pulse on the current technologies
    -
- **Closing - Moderator: (3 min)**
  - o Reference the chat (ask how long the chat will stay open)
  - o Thank you



# Creating a Cross-Departmental Degree Program

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Strengthening Mobile Application Resources and Technician Training (SMARTT)

Columbus, OH

**COLUMBUS STATE**  
COMMUNITY COLLEGE



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# Mobile Application

DESIGN AND DEVELOPMENT

COLUMBUS STATE  
COMMUNITY COLLEGE



**Jon Lundquist**  
Professor & Principal Investigator  
Art, Media & Design Department



**Peter Carswell**  
Professor & Co-Principal Investigator  
Information Systems Tech Department



**Stephanie Schuler**  
IST Project Manager  
Grants Department



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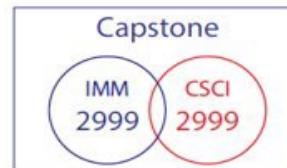
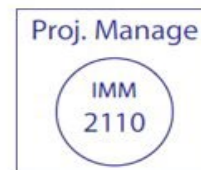
# Mobile Application

## DESIGN AND DEVELOPMENT

COLUMBUS STATE  
COMMUNITY COLLEGE

### IMM - Mobile App Design

Knowledge and Skills learned - Courses



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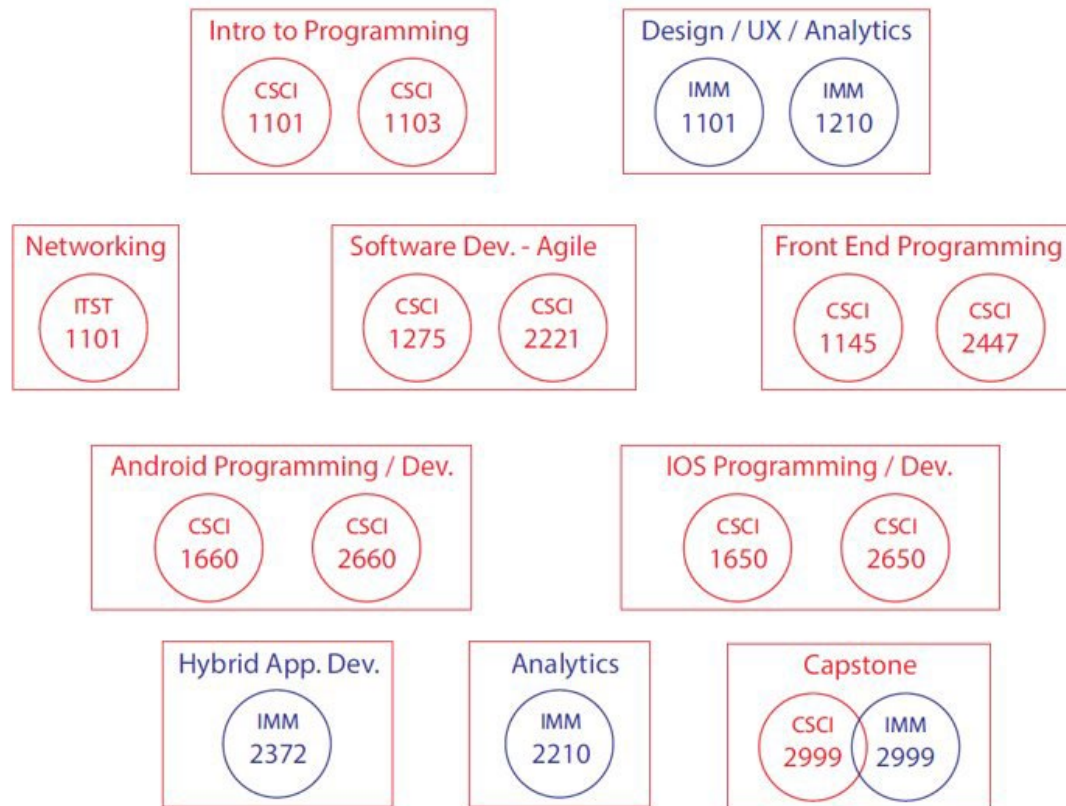


# Mobile Application

## DESIGN AND DEVELOPMENT

COLUMBUS STATE  
COMMUNITY COLLEGE

### CSCI - Mobile App Development Knowledge and Skills learned - Courses



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# Mobile Application

DESIGN AND DEVELOPMENT



COLUMBUS STATE  
COMMUNITY COLLEGE

December 2019



March 2020



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# Thank you!

Learn more at [csc.edu/grants](https://csc.edu/grants)

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COMMUNITY COLLEGE



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