IMDM 498A Augmented Reality Design for Creatives and Coders

Instructor: Jonathan David Martin  
Credits: 3  
Grading: Regular  
M/W 3:30–5:50 p.m.  
Prerequisites: None (junior or senior standing)  
Restriction: Permission of the instructor

Why take this course:
This course is for students with junior or senior standing in any major who have an interested in digital performing arts. Augmented reality (AR) is starting to appear everywhere: in camera filters on social media, in smartphone video games, and increasingly, in the performing and visual arts. But what exactly is augmented reality? How do teams of collaborators from a range of creative and technical expertise design works of performance and interactive media that uses AR? The first class of its kind ever offered to UMD students, we will explore what exactly makes an AR experience and how AR offers innovative new ways to merge our digital and analog worlds. The course will introduce students to design tools like Unity and Vuforia alongside digital performance and storytelling tools like live-streaming and branching narrative applications. Learning will be, "hands on," with students working in teams to conceptualize, design, and build their own AR creations. The course is open to students with advanced standing of all backgrounds who have an interest in the application of AR in interactive media and performing arts.

Course Description
The goal of this course is to introduce the fundamental elements of concept creation, team collaboration, and technical skills necessary to create fully-realized portfolio projects for augmented reality (AR). We will explore what exactly makes an AR experience, with an emphasis on its application in the performing arts, and how AR offers new ways to merge our digital and analog worlds. The applications for AR are opening up exciting new possibilities in the areas of performance, music, visual art, and journalism, just to name a few. AR experiences and products are being made by teams of creative artists and coders who are able to borrow from a broad set of storytelling and technical skills from other disciplines like theater, computer science, user experience, and graphic design. The course will introduce students to design tools like Unity, Blender, and AR specific tools such as Vuforia, in addition to digital performance and storytelling tools like live-streaming and branching narrative applications. The course is open to students with advanced standing of all backgrounds who have an interest in the application of AR in interactive media and performing arts.