



## Virtual Places

Real time experiential design and visualization of Urban Spaces

Option Studio, Fall 2019

Professor Henry Richardson

with:

Christopher Morse, SHoP Architects

Alexandra Pollock, AIA, FXCollaborative, and

The Project WREN Team from Epic Games

There is a paradigm shift taking place in architecture and urban design. It is a shift from designing in space-time to creating place and occasion. The former is top down, relies on masterplans and abstract, conceptual models; the latter is real time, experiential, and immersive. In this fall's studio we will design virtual urban places using selected urban typologies and immersive VR tools based on Epic Inc.'s gaming engine. The studio will simultaneously explore two sets of design agendas. The first, urban design, will examine concepts of place making and their use in simulating virtual cities. Urban typologies we will study include: the street, the plaza or square, urban edges and water fronts, and green infrastructure drawn from real world examples as well as fictional environments used in games, movies, and literature. This initial phase of explorations will be followed by the design of a specific, mixed used, hybrid, urban precinct in a given city.

The second agenda, "tools and methods", will comprise learning and applying virtual reality design and visualization software based on Epic's gaming engine UE4. A special VR studio equipped with computers and VR headsets will support the semester's explorations. Live hands-on workshops and webinars will be offered to "tool up" for the studio. Familiarity with, and basic skills in, CAD are prerequisite.

There will be no physical travel as in most option studios. Instead this course will be teleporting and let you virtually experience several famous cities and urban places in real time. A detailed course syllabus, work plan, and bibliography will follow.

This studio is supported by a research grant from Epic Games, equipment from Hewlett Packard Inc., and software licenses from ESRI and Mindesk.