Learning with the Body: Exploring the Design Space of Embodied Educational Games

Eddie Melcer
PhD Candidate, NYU Tandon School of Engineering

Monday, February 5, 2018
2:00 pm – 3:00 pm
Atwater Kent 233

Abstract:

Embodiment is the notion that cognition arises not just from the mind, but also through our bodies’ physical and social interactions with the world around us. This body-centric approach allows us to incorporate a variety of novel interfaces and interactions — such as tangible blocks, augmented board games, whole-body tracking, or augmented reality — into the design of educational games to improve learning outcomes. In this talk, I discuss the benefits and drawbacks of an embodied approach to designing games, present a design framework outlining key methods for incorporating physicality into educational games, and show results from studies of an educational programming game created to explore the efficacy of embodied interaction with tangible programming blocks.

Biography:

Eddie Melcer is an independent game developer and PhD candidate in Computer Science at the New York University Tandon School of Engineering. Previously, he was also a visiting researcher and lecturer at the University of California, Santa Cruz Department of Computational Media. His teaching and research interests are at the intersection of games, human-computer interaction, and learning science — focusing on the usage of novel interfaces and physical gameplay to enhance learning outcomes in educational games. Eddie’s work has received a Best Paper award at FDG 2015, and Honorable Mention awards at CHI 2016 and CHI 2018. His games have also been featured in a number of prestigious venues such as IndieCade, IndieCade East, Come Out & Play, and the Serious Games Showcase & Challenge.

Host: Prof. Jennifer deWinter