



Chris Brancato
EE'18

Ross Kaplan
EE'18

Sahil Patel
EE'18

Shalin Patel
EE'18

**Professor
Toby Cumberbatch**
FACULTY ADVISOR

SHARE: SYNCHRONIZED HEADSETS FOR AUGMENTED REALITY EXPERIENCES

Modern virtual and augmented reality systems are both immersive and interactive. Despite these strengths, such systems do not allow users to interact with each other. We describe an augmented reality system, SHARE, that enables user interconnectivity through a shared virtual space. SHARE provides two users with two connected headsets, each equipped with an optical and hand-tracking system, which overlay an interactive game of checkers onto the user's field-of-view. We first discuss the background research necessary to implement a multi-user augmented reality system, transitioning into implementation details of our constructed system—both hardware and software related.

