

Improving the Efficiency of Beverage Refill Rates in Restaurants
(Technical Report)

The Viability of Mixed Reality as a Medical Tool
(STS Research Paper)

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Preface

Automated systems can relieve humans of drudgery, improve speed and reliability, and augment instruction, but in all such applications automation risks undesirable effects, such as employment loss, risk compensation, and the loss of expert human judgment.

At restaurants, diners typically appreciate waiters who unintrusively keep their beverage glasses full. Busy waiters, however, must sometimes forego looking for empty glasses to attend to other diners' demands. The research team designed a scalable system that improves the consistency of restaurant beverage refills and reduces waiters' and diners' effort: a smart coaster would detect the weight of a beverage and signal a server when it is empty.

By immersing medical students in simulated scenarios that closely mimic real life, virtual and augmented reality can be a powerful educational tool, but some contend that they are no substitute for working with real patients. High-tech medical training can simulate experiences that would otherwise be difficult to obtain or repeat, but such techniques can divert students from real human interaction. How are doctors, patients, medical schools, and corporations competing to determine the place of high-tech in medical education? Doctors and some patients tend to question high-tech medical treatment; they fear its detriment to the quality of a patient visit. Medical schools, VR companies, and some patients tend to favor it; they value its quantitative benefits to a patient, such as surgery success rates and costs per patient or see it as a market for their products.