1839971: Collaborative Research: Pre-Skilling Workers, Understanding Labor Force Implications and Designing Future Factory Human-Robot Workflows Using a Physical Simulation Platform

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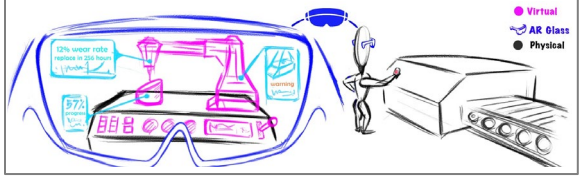
Goals: 1. Developed physical-reality simulation platform (PRSP), 2. pre-skilling the manufacturing workforce, and 3. understanding and evaluating the labor market implications of augmented Humans (H)-Robots (R) -Machines (M) and AI technologies.

Future Technology

> Mixed reality (MR) to capture interactions + workflows for H+R+M

> In-situ Authoring for IoT-based Machines

> Humans + MR + AI for easy accessibility

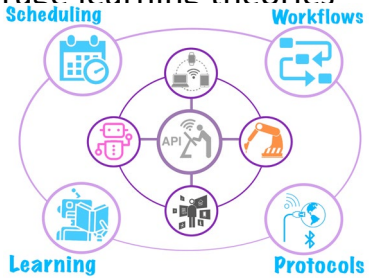


Future Work

> Assessment and metrics in MR: cognitive and learning

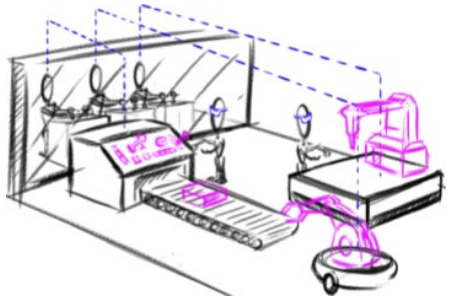
> MR based local-spatial-body coordinated tasks

> Leverage learning theories



Future Workers

> Design and Prototyping Smart Things & Augmenting Human Cognition (Purdue), IoT Course (UCI) 140 + 120 students annually



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