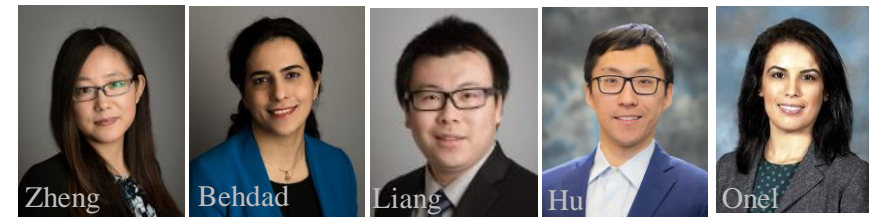


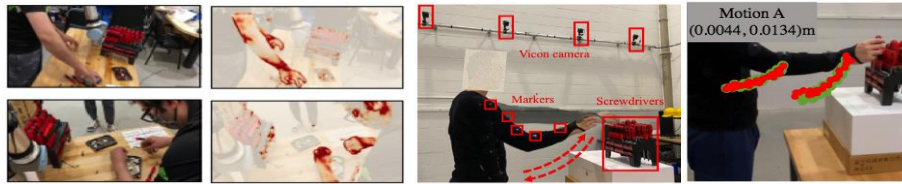
# FW-HTF-RL: Collaborative Research: The Future of Remanufacturing: Human-Robot Collaboration for Disassembly of End-of-Use Products (#2026533/2026276)

University at Buffalo: Minghui Zheng (mhzheng@buffalo.edu) and Xiao Liang  
 University of Florida: Sara Behdad (sarabehdad@ufl.edu), Boyi Hu, and Gulcan Onel



June 2022

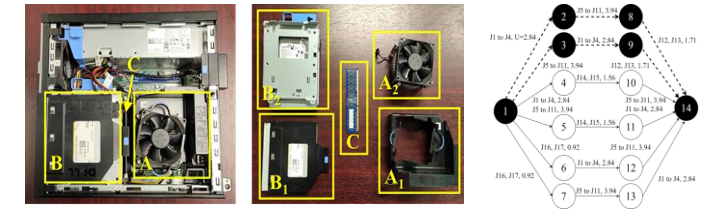
## Human Motion Identification and Prediction with Quantified Uncertainties



[1] IEEE RA-L, 2022; [2] IEEE/ASME T-Mech, 2022.

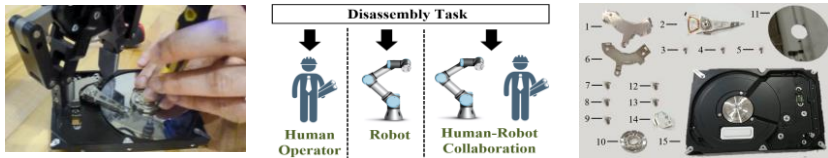


## Multi-attribute Optimization of Disassembly Sequence Planning under Uncertainty



[6] ASME MSEC/NAMRC 2022.

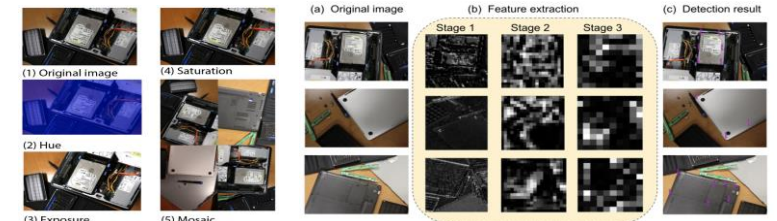
## Task Allocation and Disassembly Sequence Planning Considering HRC and Human Behavior



[3] Robotics and Computer-Integrated Manufacturing, 2022;  
 [4] IEEE Transactions on SMC: Systems, accepted.

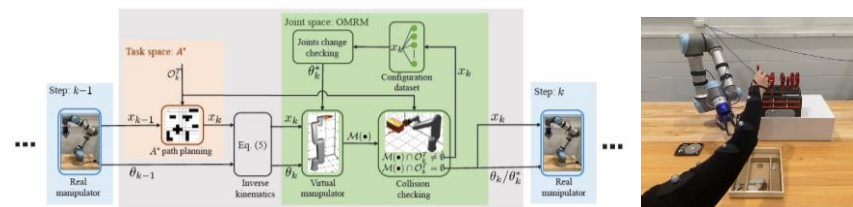


## Screw Detection and Tools Recommendation System for Robotic Disassembly



[7] ASME MSEC/NAMRC 2022, [8] One journal under review.

## Fast Hybrid Trajectory Planning in HRC Considering Human Motion Prediction.



[5] One journal under review.

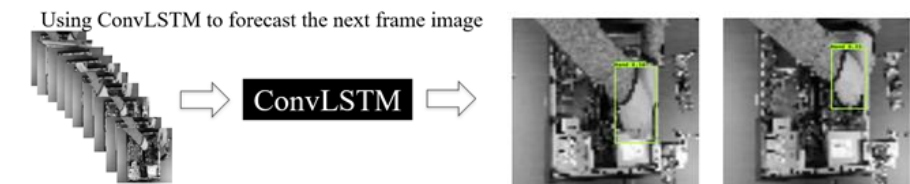
### Workshops

**WORKSHOP**  
**Advances in AI-Powered Collaborative Robots**

2021:  
 two plenary speakers;  
 >100 participants

2022: expected in Aug, stay tuned

## Human Hand Motion Prediction in Disassembly Operations



[9] ASME IDETC 2022.