# #202026584, FW-HTF-RM: Enhancing Future Work of Nursing Professionals through Collaborative Human-Robot Interfaces

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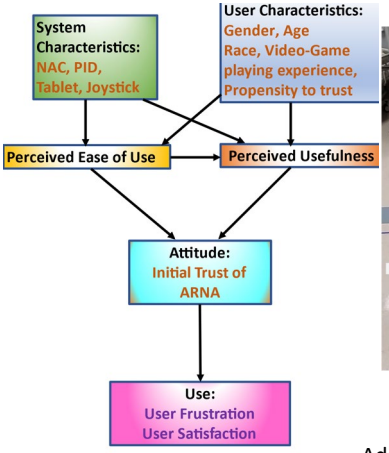
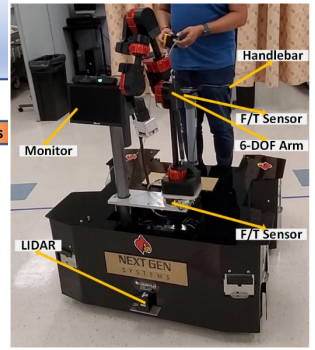



**ARNA**
Adaptive Robotic Nursing Assistant

## Taxonomy of tasks for automation

- We generated a taxonomy of nursing tasks and rated them in terms of the degree to which the tasks can be automated.
- We rated each task by five dimensions: emotional load, standardization, predictability, complexity, physical demand

Future Workers
= Nurses+Robots

*Objective 1: Develop a taxonomy of tasks and skills based on whether they can be justifiably automated with robotics.*

Future Technology
=CHRI

*Objective 2: Create methodologies through which CHRIs can be designed and evaluated.*

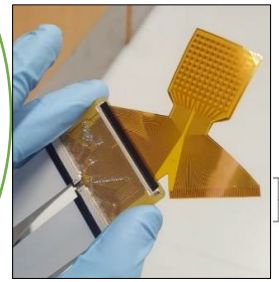
Future Work
= High-Tech Nursing

*Objective 3: Evaluate the potential of CHRIs to enhance productivity and reduce nurse stress.*

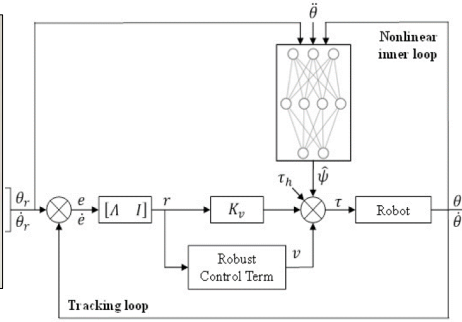
Project
#202026584

*Objective 4: Estimate the potential economic impacts of introducing robots for routine nursing tasks.*

**CHRI = Collaborative Human-Robot Interfaces** defined as the intelligent connection between multimodal arrays of sensors monitoring human users, and collaborative control decisions and actions taken by robots to assist human users.



Robotic Skin for Physical Human-Robot Interaction




Neuroadaptive Control for Collaborative Robots


Adaptive Interface for Remote Navigation and Manipulation