Collaborative Robotics with Baxter

The Technology and Innovation

- Implementation of robot Baxter in the Djuric’s Robotic Lab
- Study of terminal programming
- Study the collaboration (combining human and robot skills)
- Creating tasks without a “pick and place” and “more end effector options” features
- Flexibility and ability to perform multiple tasks
- Security
- Implementation of terminal programming on Ubuntu
- Use of The Tasks Map

Community/Industry Impact and Value

- Permit the learning of how to program Baxter on Industrial robots
- Add the communication of robot and human
- Manage operational risks safely

Community/Industry Engagement

- Djuric’s Robotic Lab at Engineering Technology

Team Composition

- Nassar AlMarry, ME
- Ana Djuric (Faculty Advisor)

Learning Experiences

- Industrial Baxter programming
- Industrial Baxter configuration
- Automation System
- Production management
- Tasks Map Calibration

Further Research and Development

- Implementation on industrial production
- Capability to recognize the workspace and take actions
- Recognizing of damage and errors in pieces