### Introduction

The research being conducted by my Ph.D student mentor, Kaleen, is creating a Peer Mediation study for children from 3rd-5th grade. By using a Robot named Blossom. This research matters to our group because it will help children with their self-perception and improve their skills to resolve conflicts on their own. During my time in SHINE I have been working on making My Blossom Robot move and show emotions. As well as conducting a study with children to see if they perceive the emotions we have written down for Blossom.

### Skills Learned

- How to code using Python (Examples: for loops and making variables,
- How to use the Command Line interface to navigate files, folders, and run software.
- Learned how to use git and GitHub to save work and backup work on the internet. As well as share code or access code on another computer and allow other teammates to view the work.
- How to make new sequences for Blossom (example I made a sequence that was too slow for a part of my script, so I had to make it faster.)
- Learned how to deal with an error called “Woody”. I would get this error often in the beginning, but later resolved it and found out it was a power issue.
- Designed a study to see the children perspective on the emotion conveyed by the robot to check if their perspective matches with the intended emotions.
- Learning how to resure code

### How This Relates to Your STEM Coursework

- This relates to my STEM coursework by allowing me to get experience in the robotics field.
- This program has helped me get more experience on the software part of a raspberry pi. At school in my robotics club I would use the hardware part of a raspberry pi.

### Next Steps for You & Advice for Future SHINE Students

- Some of my next steps for me is getting into a college with a good Engineering school and use robots to help people just like Blossom does.
- Some advice I have for the future SHINE students is to have as much fun as you can and to always ask questions. Never be afraid to talk to your mentors or your professor.
- Some other advice is to keep a chart of the progress you have made on your project. It will make it easier for you to complete your poster.

### Objective & Impact of Professor’s Research

The Interaction Lab is led by Professor Mataric, and focuses on how humans and robots interact with one another. Professor Mataric’s research is to help people, using endowing machines, she would like to use her research to help most children by making a robot help children with calming down before getting shots.

### Citation


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Figure 1 is our professor at a talk showing the robot and how it moves.

Figure 2 is two Blossom Robots

Figure 3 is the code I created in order to make my Blossom move.

Figure 4 is the name of my project

I would like to thank my mentor Kaleen for always answering my questions when I was stuck or confused. As well as Professor Maratic for letting me work in her lab and always being a fun person to be around.