

# NRI:INT Design and Development of a Social Robot to Gather Ecological Momentary Stress Data from Teens

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**Project EMAR** (Ecological Momentary Assessment Robot) is an interdisciplinary project to design, develop and deploy an engaging and customizable social robot to gather ecologically valid, teen stress and mood data, while delivering a micro-intervention.



**Project Activities** 15 studies conducted so far.  
Partnerships with 12 local area high schools. Engaged with 400+ teens.

## Requirements

**Customizable** - ability for teens to change robot facial expressions, sounds, etc

**End-user programming** -  
Be able to create a robot that fits their needs and preferences



**Project Approach** Using a **participatory** approach to **human-centered** design, we engaged teens as co-designers to develop project principles and social robot requirements.

## Broader Impacts

Teens are the **future roboticists**, designers, and engineers.

Novel, creative and scalable **solutions to support their mental** health are essential to the success of our future.

**Next Steps:** Studies exploring remote access to EMAR given COVID. Eventual deployment study in a public high school to explore adoption and impact.

