

Jarvis: A Robotic Companion

Moody, Jackson (School: L&
N STEM Academy)

As a result of isolation during the COVID-19 pandemic, many people have increasingly become depressed and lonely. This is having a significant effect on high-risk senior citizens and virtual learners of all ages. What if, by creating a physical representation of an artificial companion designed to interact with and understand people, users could improve their mental health while machine learning suggests and implements treatments? Jarvis is designed to do just that. By logging the words he understands from the user, Jarvis can create reports on the user's cumulative emotions and learn how to better the consumer's life with routines and suggestions. In this design, I used two open-source projects and a small computer to accomplish everyday tasks and analyze user intents and feelings. To test my project, I set aside a week to primarily use Jarvis, as opposed to my Google Assistant, for my day-to-day queries. I logged my own moods and the timestamp of frequently used requests and then analyzed my notes compared to Jarvis's report. This technology can be applied to a multitude of fields from senior care, teaching needs, and social well-being. Jarvis could connect with other smart devices to keep track of sleep, exercise, and heart-rate. Jarvis could also learn to interpret body language, facial expressions, and changes in the human voice and include that input in his analysis.