



DreamFace  
Technologies LLC

# Socially Assistive Robots for Seniors: Ryan CompanionBot



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1 in 3

seniors dies with Alzheimer's  
or another dementia



Over  
11 million  
Americans



provide unpaid care for  
people with Alzheimer's or  
other dementias

These caregivers  
provided more than  
16 billion hours  
valued at nearly

\$272  
billion

In Colorado  
168.1 %



increase in Alzheimer's  
deaths since 2000

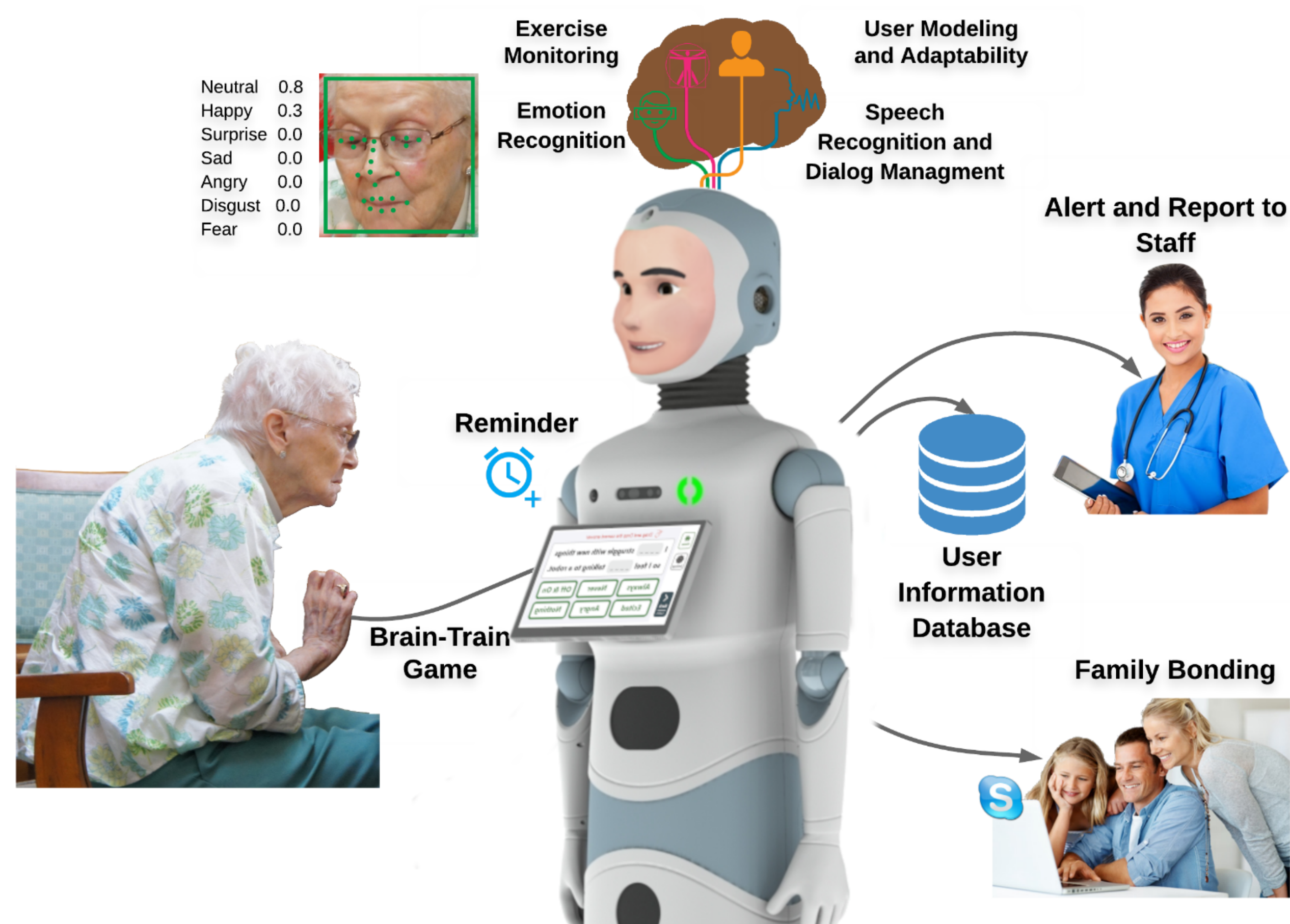
- Due to the increasing life expectancy and shortage of caregivers, older adults living in senior care facilities often feel lonely and isolated.
- It is well established that social interaction and mental stimulation are critical for improving their well-being.
- Social robots may alleviate some of the side effects of loneliness, by providing companionship and cognitive and physical training.

## Ryan is...

- Created by DreamFace Technologies
- A companion for seniors living in independent/assisted living communities
- Empathic and expressive
- Aiming to motivate users to improve mental and physical health

## Ryan has...

- Multiple streams of input data for observation
- Many output streams for reaction
- Intelligent programs for making decisions and empathizing and conversing with users



## Study

- 10 seniors at a local senior community participated in a three week study
- Ryan's impact was evaluated with the study participants for:
  - \* Word count
  - \* Percentage of positive emotion
  - \* Pre/Post-study depression measures
  - \* Exit and post study interviews
- Statistically significant improvement in users' Face-Scale mood measurements
- These measurements indicated a positive effect of interaction with Ryan
- Word count and exit survey analysis show that participants perceive Ryan as:

✓Empathic ✓Engaging ✓Likeable



## Subject Testimonials

"I liked her ("Ryan"). She is witty. At first, I didn't know what to think. I got better as I went. She sure has a pretty smile. It tears me up when she smiles, blinks her eyes. I would like to take her out to dinner but she wasn't hungry. Maybe next time."

"I had a good time. I enjoyed her very much. You want her to be a real thing like an addition to your home. I didn't think of her as a person like a dog or a cat."



## The future of Ryan

- Collaborating with Colorado based assisted livings to have Ryan as a part of their community
- Ryan as a CBT (Cognitive Behavioral Therapy) aide
- Ryan as a Yoga teacher