Paper 1: Social support agents for older adults: longitudinal affective computing in the home

Summary: The focus of the paper is on an AI that acts as social support to decrease feelings of and the health risks linked to loneliness, with a primary focus on the effects of such an AI on the elderly. A version of the AI was tested in the “Wizard-of-Oz” study, which was analyzed to understand the potential effectiveness of a fully developed social support agent. The AI in the study was influenced by similar studies that focused on things such as conversational agents for the elderly, artificial companions for the elderly such as robot dogs, and mood managing AI that helps clients manage anger. Previous studies seem to indicate that users tend not to see long-term effects after being taken-off the agents however seem to experience positive effects while using the agents. The results of the study have led to the planning of adding more sensors and emotional comprehension to the AI in order to focus on invoking more positive interactions and feelings from the elders.

Ring, Lazlo, Lin Shi, Kathleen Totzke, and Timothy Bickmore. 2015. "Social support agents for older adults: longitudinal affective computing in the home." *Journal on Multimodal User Interfaces* (Springer) 9: 79–88.

Opinion: The topic of the paper is interesting and the implementation and study of the social support agent seems well executed. I believe this is a worthwhile read for anyone interested in socializing agents or the development of AI that has interactive capabilities. I did find the middle a bit dry and repetitiv, the goal of the study was re-stated in every section and subsection it seemed. One thing I feel is that the study has a very limited and narrow scope due to the small size of the subject pool and the lack of randomness involved. I would love to see the scale of this study expanded so that more types of elderly people are included.

Paper 2: Emotion models for textual emotion classification

Summary: The breakdown and current understanding of how software detects and recognizes emotion from text to gather data about websites, products, and other content. The paper presents three kinds of emotional models, going from simple to more complex: categorical, dimensional, and extended. Categorical breaks down human emotions into several core emotions, the number varying depending on the theory. Dimensional suggests that there is a scale in which every word is a certain amount of each emotion, this model is used less than the categorical model and fails to account for context. Extended is a combination of categorical and dimensional and focuses on the emotion of the text group rather than the individual words.

Bruna, Ondřej, Hakob Avetisyan, and Jan Holub. 2016. "Emotion models for textual emotion classification." *Journal of physics: conference series.* 012063.

Opinion: This paper did not give me a great deal of information I have not already learned from this class, however did make me give more thought to the subject of classifying emotions. I did start to think about how odd the inclusion of surprise is in Categorical emotion models, specifically because I consider it to be a combination of usually two core emotions: fear and something else such as joy or anger. I do think this is a good paper to use as an introduction to these concepts.

<https://d2l.depaul.edu/d2l/le/content/871134/viewContent/8901264/View>

<https://d2l.depaul.edu/d2l/le/content/871134/viewContent/8901244/View>

Bruna, Ondřej, Hakob Avetisyan, and Jan Holub. 2016. "Emotion models for textual emotion classification." *Journal of physics: conference series.* 012063.

Ring, Lazlo, Lin Shi, Kathleen Totzke, and Timothy Bickmore. 2015. "Social support agents for older adults: longitudinal affective computing in the home." *Journal on Multimodal User Interfaces* (Springer) 9: 79–88.