

Exploring Accessibility and Empathy via Conversational Agent in Board Game Players who are Blind, or Low Vision and Sighted



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Motivation

Current Challenge: Board game rulebooks are inaccessible

Our Position: Can a conversational agent (CA) be:

1. An accessible tool to communicate board game rules to players who are blind or low vision (BLV)?
2. An empathy-inducing tool for players who are sighted?

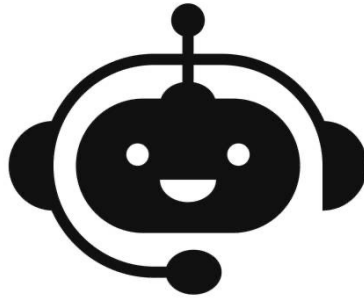


Conversational Agents

A conversational agent is an artificial intelligence system that mimics human language through text or voice.



Siri

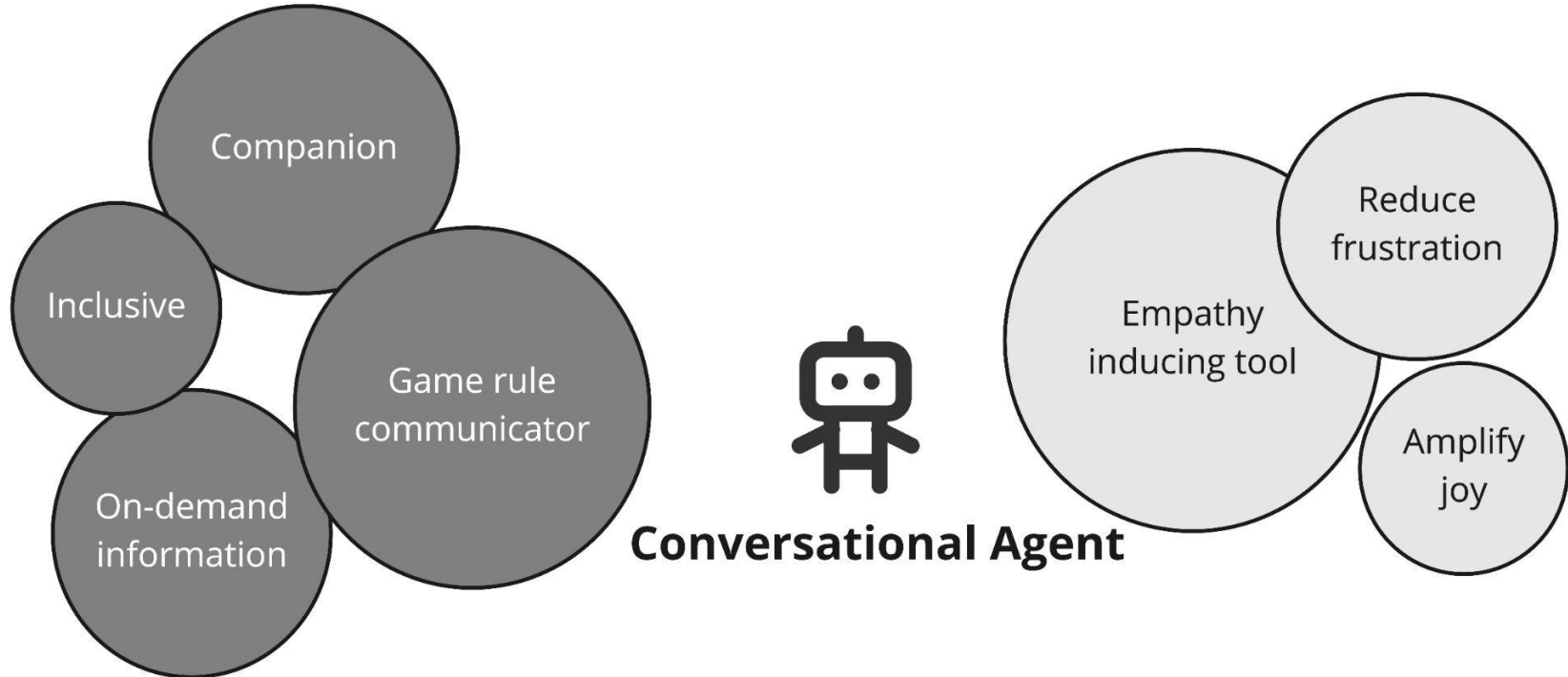


Chatbot



Amazon Alexa

Our Proposed Research Directions



Research Direction 1

CA as an Accessible Board Game Rule Communicator

CAs can:

- provide information on-demand and gradually
- act as learning partners and companions
- provide flexible options for communication (speech or text)
- be customized (Alexa skills)

Research Direction 2

CA as an Empathy-inducing Tool

Negative empathy = mitigating function

- Eliciting negative empathy in sighted players could benefit BLV players
- Sighted players can behave in ways to mitigate frustrations related to learning rulebooks in BLV players.

Positive empathy = amplifying function

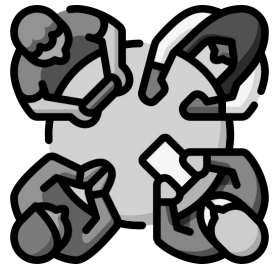
- Eliciting positive empathy can motivate sighted players to amplify the feeling of satisfaction related with playing in BLV players.

Questions and Challenges

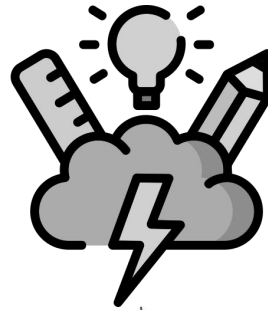
- How can researchers design CAs to elicit empathy?
- How can researchers design CAs to make sure they are not eliciting pity?



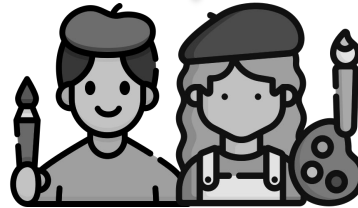
Proposed Method: Co-design



Exploration



Prototype Evaluation



Design (storytelling)

Explore the potential of a conversational agent as a board game rule communicator and an empathy inducing tool through co-designing.

Thanks for listening!

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