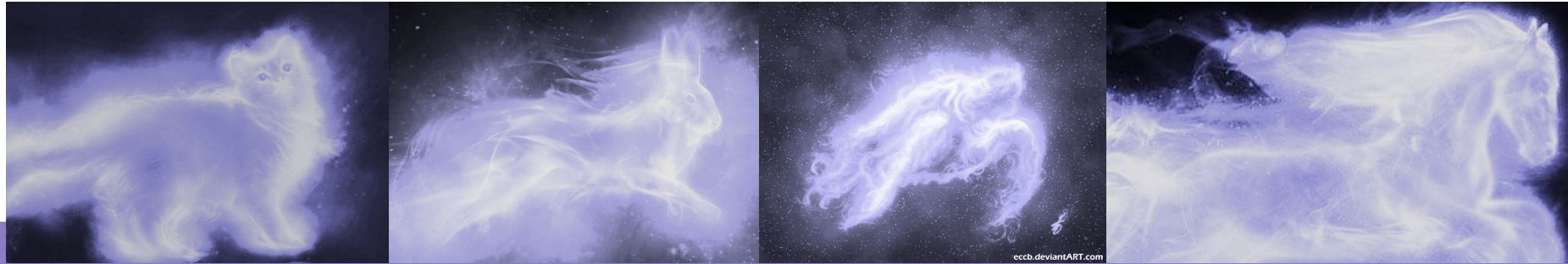


ROBOTIC SPIRIT ANIMALS.



A concept.
Zoe Marie Rathbun

The Golden Compass



THE FUTURE IS SHAPED BY FANTASY:

innovations in technology
and human achievement
must first be imagined
before their plausibility
and application can be
explored

(Ask Marko)



Inkheart



Avatar: the Last Airbender

CURRENTLY, MANY ROBOTIC CREATIONS

Tend to be humanoid in nature....



WHY NOT ANIMAL COMPANIONSHIP?

- Some feel a greater bond to these creatures as they lack judgement and other flaws of the human perspective.
- In a robotic application, perhaps reduction in the strength of effect of **uncanny valley** if robot portrays non-humans
- Other point: Ethics of evolutionary domestication of a species and enslaving it for our pleasure.

THE CONCEPT:

A personalized, robotic companion that recognizes you, learns about your emotions, behaviors and mannerisms and uses machine learning to create a bond with you over time.

Helpful for people with autism, the elderly, the socially anxious, depressed, or even any "normal" person that wants a positive force that is always with them and always has their best interests in mind.

This project could have tangible effects on mental illness and loneliness/alienation in our society.

SO, WHAT WOULD THIS TAKE?

1. Recognition of individual
2. Recognition of facial emotions and body-language
3. Speech recognition/comprehension and learning
4. Machine learning to 'get to know a specific person' & developing social relationship
5. Further object recognition for intelligence and interaction
6. Robotic Following:
7. Durability/Adaptability and Animal-Like Behavior.
8. Further therapeutic research for specific situations

NOTABLE RESEARCH

- Most advances in areas related to my project were made in private sector.
- Facebook: Project DeepFace, Recognition of Person from 2 images with 97% accuracy
- Most things I could imagine for this project were possible in some capacity.

JIBO :



THERAPEUTIC APPLICATIONS

POPOCHILLA



PARO



REPLICATING ANIMAL MOVEMENT



BOSTON
DYNAMICS

PHASE I: EXHIBITION

- Group of Robots in given area
- “Lock onto target” Change to mirror them in some way
 - (ie display color of their clothing.)
 - Follow them
- Have conversation with them, Get to know them.
 - Store data on each person (visualize later?)

PHASE II: PERSONAL COMPANIONS FOR ALL

- With enough funding and interest, individualized, intelligent robotic companions could be the next technological necessity.
 - Replace Smartphones?
- Further directions:
 - autonomic data, shape shifting abilities etc.

THE END!

