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Who let the bots out?!

Playing Our Way Through Forest with Robots

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Robots: From Labs to Homes to Forests?

🤖 **Robots are no longer futuristic; they're here and among us.**
→ In homes (e.g., vacuum bots), hospitals (e.g., surgical robots), streets (e.g., delivery bots), and workplaces (e.g., industrial arms).

🌲 **But what happens when we move beyond urban and controlled settings?**
→ The forest presents a complex, unpredictable, and sensory-rich environment.

🌱 **Robots in the forest challenge traditional HRI assumptions.**
→ How should a robot behave in the wild?
→ What roles can it play?
→ What relationships might it build?

🎮 **We're now exploring how robots might become companions in the forest**
→ Not just tools or helpers, but **co-explorers, playmates, storytellers, or ecological provocateurs**.

What Have We Done So Far?

1) 👫 🤖 **Participatory design (PD) workshops**
👉 *for understanding the design space of companion robots for the wild*

2) 🚶 ♀ 🤖 **Study on outdoor walking with a companion robot**
👉 *for understanding humans' experiences and perceptions*

3) 🎲 🌲 **Workshop on exploring play to ideate and design forest-robot interactions**
👉 *to create goal-driven and recreational forest-robot concepts through games and play*
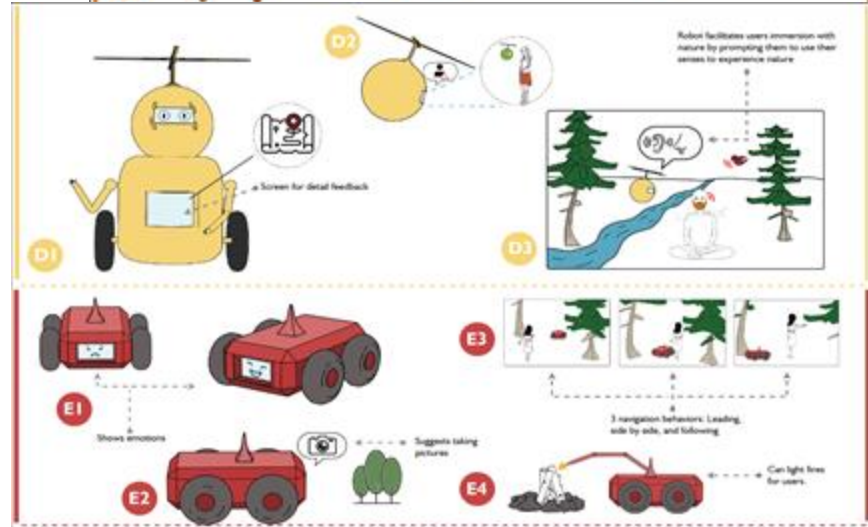
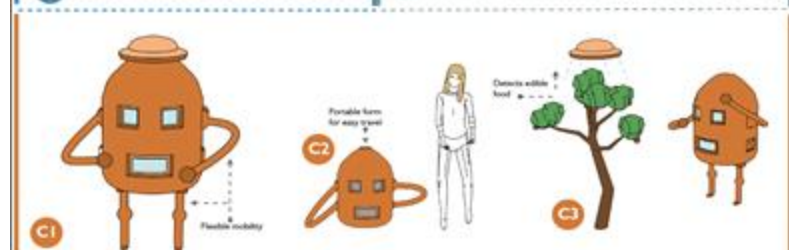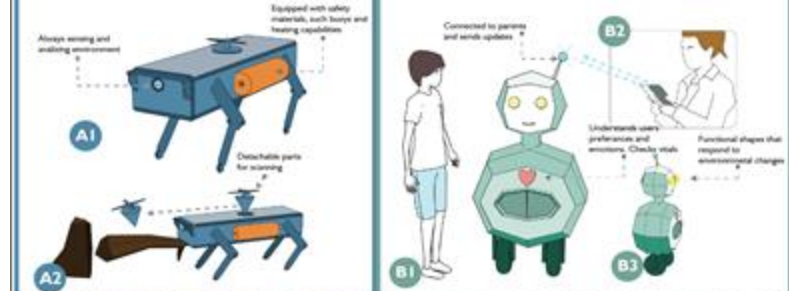# Robot Concepts from PD Workshop

SOS 🚑 🧑‍🚒 Robot as **emergency support**

🗣️ 🧍 ♂ 💬 Robot as **social proxy**

🧍 ♂ 🛡️ ⚠️ Robot as the **barrier between human and danger**

🌲 📡 🌿 Robot as **facilitator of active sensing and engagement in the forest**

Outdoor Walking with a Robot Companion

🔮 🤖 Projected relationalities

💃 🤖 Robot adds dynamism to embodied interaction

🧠 🟣 Robot affects social perception of self and others

🎭 🎲 From ambiguity towards playful explorations

Playful Ideation and Design of Forest-Robot Interactions

🎨 🧩 Play as a mode of creation or creativity

🕺 🌀 Bodystorming

🎬 📝 Storyboarding and video sketching

Concepts Created Through Playful Creation (1)

Hey, fellow animals!

- Robot mingling with animals in the forest
- Robot creating a balance and harmony in the forest
- Robot becoming a part of the forest

Concepts Created Through Playful Creation (2)

Justice for Mushrooms!

- Robot protects valuable forest resources
- Robot drives dangers away from valuable resources

Concepts Created Through Playful Creation (3)

Mosquitonomous

- Robot as a
  community driver
- Robot collect,
  specific forest data

Thank You!