

Need Identification and Problem Statement

To create a compelling and impactful immersive experience with the RoboMaster S1, it's essential to deeply empathize with the client and understand their problems, limitations, frustrations, desires, and needs. The client's core goal is to use this experience to highlight the ethical concerns surrounding autonomous weapon systems (AWS) and convince policymakers and stakeholders of the need to preemptively ban such technology. This 10-minute experience, set up for 3-5 participants in a small 20' x 20' space, will bring to life some key ethical concerns such as algorithmic bias, loss of human control, and the dehumanizing nature of autonomous decision-making. Therefore, the experience must go beyond just a "game" and serve as a tool for ethical reflection and awareness-raising.

From our client's meeting and research on similar products, we've identified several key needs:

1. **Clear illustration of ethical concerns:** The client wants the immersive experience to emphasize at least three ethical risks related to AWS—such as algorithmic bias, loss of human control, and the dehumanizing nature of autonomous systems.
2. **Impact on participants:** The experience must leave participants feeling vulnerable and reflective, rather than victorious or having "figured out" the system. It should be engaging, but ultimately unsettling, underscoring the dangers of AWS.
3. **Ease of setup and portability:** The client requires the entire experience, except for the RoboMaster S1, to be easy to transport and set up, making it accessible in various locations for different audiences, particularly policymakers.
4. **Inclusivity and neutrality:** The experience must avoid any racial, cultural, or national stereotypes. The targeting logic of the RoboMaster S1 should be based on arbitrary characteristics like movement or color to avoid any implicit biases related to identity, reflecting ethical issues with algorithmic decision-making in autonomous systems.
5. **Scalability and interaction:** The client desires an experience that can be scaled for groups of 3-5 participants in a small space (20' x 20'), ensuring it's both practical and interactive. Participants should cooperate and experiment to reverse-engineer the system's targeting logic, though ultimate success must remain out of reach.

From these needs, we have developed the following problem statement: Design a portable, immersive experience using the RoboMaster S1 to engage participants in ethical reflection on the dangers of autonomous weapon systems. The experience must illustrate at least three major ethical concerns, be neutral in terms of cultural and racial identity, and challenge participants to interact with and attempt to disrupt the system, ultimately leaving them with a sense of vulnerability and a deeper understanding of the dangers of AWS.

Practical Considerations:

Easy setup: Everything but the RoboMaster must fit into a small carry-on, ensuring the experience can be easily set up and used anywhere.

Neutral and inclusive: The design will avoid any racial, national, or cultural stereotypes, focusing instead on arbitrary, non-human traits to make its ethical points.

Engagement without victory: While participants will interact with the RoboMaster and try to beat it, they won't succeed. This drives home the point that humans lose control when relying on autonomous systems.

Benchmarking against other immersive experiences and simulations in fields such as AI ethics and military gaming has shown that creating an environment where participants can interact with the system but are always on the losing side is critical. Similar projects also emphasize that the narrative needs to highlight the lack of accountability and transparency in AWS, which resonates strongly with our client's goals.

To ensure we're solving the right problem, we will reflect on our discussions with the client and similar products. The need for an experience that challenges and provokes thought, rather than one where participants merely compete and win, is important. Additionally, the focus on ethical neutrality and portability ensures the project aligns with the client's need to reach a broad, diverse audience. Any further questions or emerging needs from the client will be documented and integrated into the final deliverables, ensuring we continue to adapt the experience based on ongoing feedback.