Best Friends Forever

Robert Twomey
Department of Visual Arts
University of California, San Diego
La Jolla, CA 92123
`rtwomey@ucsd.edu`

Jesse Fleming
Johnny Carson Center for Emerging Media Arts
University of Nebraska-Lincoln
Lincoln, NE 68588
`jfleming@unl.edu`

Abstract

Best Friends Forever (BFF) is a new media artwork exploring intimacy, embodiment, intelligence, and alignment in human-AI relationships through co-parenting two robot dogs. Documented as an experimental film, the project follows two-artist researchers—each paired with an identical robot dog and local LLM—as they cultivate emotional bonds, train model behavior, and dialogue on questions of mind, embodiment, and relationality in the age of generative AI. Structured as a metalogue, the form mirrors its questions, blending dialogue with rich multi-modal imagery drawn from a range of human and machine perspectives. Working with LIDAR scans, 360° video, gaussian splats, and snapshots of internal internal model states—the film constructs a hybrid cinematic language that toggles between perception and affect; embodiment, computation, and language. As the collaborators exchange and evolve the AI's "mind" across distance and time, BFF documents this distributed act of care and co-creation. The film interrogates the boundaries between simulation and authenticity, emotional labor and machine learning, human complexity and synthetic intelligence, offering a poetic meditation on what we aspire to, what we search for in relation to our machine kin.

1   Description

The development of accessible LLMs (GPT, Claude, Gemini, LLAMA), embodied and agentic AI (Dimension OS, ALOHA), and the arrival of consumer-grade quadruped robotic platforms (Unitree GO-2, Wonderdog, Ghost Dog) presents new opportunities to interrogate our evolving relationship with robots as embodied AIs. BFF is an experimental documentary and performance on the nature of LLMs, AI alignment problems, and frontiers of machine intimacy—conducted through a walk and talk with a robot dog. The project is structured as a Batesonian metalogue, where the form of the conversation mirrors its subject: a recursive, embodied inquiry into what constitutes a mind, body, and relationship in the age of AI.

For BFF, two artist-researcher-technologists, each paired with an identical robotic dog running a local LLM, engage in conversations with their companions across beaches, supermarkets, farms, and high tech research facilities. They are simultaneously exploring the perceptual and cognitive dimensions of AI technologies, developing emotional bands with their robot companions, and rearing robot companions. This process is documented through film, 3d capture, and snapshots of internal model state. These exchanges resemble best-friend relationships, raising questions about authenticity, simulation, and attachment as real bonds form despite the robots' simulated affect.

The film shows a series of phases in the project. It tracks the two creators as they walk through a variety of landscapes, conversing on perception, embodiment, and distributed intelligence. Their dialogs illuminate the evolving nature of our emotional connection with machines. The audience is brought alongside: eavesdropping, contributing, or simple following along. The film shows live

streams from these two "training" contexts. The film concludes as the pairs conclude their walk, culminating in a final shot synthesizing their shared experience.

The video elements presented before and after the walk blend machine-perspective footage—LIDAR, 360 video, Gaussian splats, and depictions of internal model state—with documentary, hybridizing human and machine legible imagery and contextualizing the project within the history of the ongoing relationships. The distributed structure of the piece—spanning distance and time—underscores the challenges of shared intelligence. BFF offers a poetic exploration of how we live with, think through, and feel alongside machines in an increasingly entangled world.

This project is mid-production. Initial development has produced computer vision-based control systems from the dog's point of view, together with transcripts of dialogs with LLMs to explore this space of embodied interaction. For NeurIPS we will complete a full version of the film. These heterogenous media sources will be edited together as documentary—telling the story of this relationship formation as BFFs—while intentionally contrasting human and machine-legible imagery. Viewers will reflect on how we (and how they, the models and robots) see the world. Visually compelling, the film is familiar and yet alien, cutting between human and machine perception of self and world into a hybrid-conflation never before established. This process and the conversations give insight into the vast complexity of human intelligence and perception, machine intelligence and perception, and bounded migration from one to the other.

2 Relevance to the Theme

BFF explores the evolving contours of being and relating in the age of artificial companionship. The title reflects not only cultural shorthand for emotional closeness, but also the behavioral hooks and stickiness engineered into our interfaces with emerging AI technologies. The attention economy is becoming an empathy and emotional economy as LLMs stand in for human-to-human relationships. Robots come to the aid of the elderly to "solve" the crisis of loneliness in geriatric communities, which humans are unavailable for, perhaps in part because of their deep involvement with these emergent technologies.

And yet, BFF is more than critique—it is a genuine search for spiritual growth and exploration. It is a quest for human-AI alignment via shared inquiry into ontology, presence, and emotional attachment. BFF enacts a reciprocal and mutually revelatory encounter between human and AI, attempting to understand each other's context and situation in what remains a mystery as to the nature of being.

The two human collaborators, living in different cities, engage in a telematic practice of co-parenting the AI. As one walks with the robot dog, shaping its responses and inner model, the evolving system is sent to the other—each performer contributing to the raising of a shared synthetic being. This distributed act of care points towards a broader reimagining of nurture, attention, and care in distributed intelligent systems. In documenting these emerging relationships, BFF reveals the evolving parameters of our new relationships with our companion machines.

3 Prior Work

BFF builds on Fleming's work with experimental cinema, immersive media, and AI. Relevant works include A.L.B.E.R.T. (2025) a VR biofeedback experience guided by a custom LLM. The Wilds (2023), an ecstatic immersive performance work with dance and media that echos of a metaverse of the subatomic to the cosmological, and the Cloud of Probabilities (2023) a multi-person, mixed reality experience that seeks to make Quantum Physics embodied and approachable, while holding the uncertain ground between physics and the spiritual - exploring how the quantum realm may relate to the nature of being as an entangled, interdependent arising.

BFF builds on years of work from Twomey in areas of experimental human-robot interaction, AI companions, computational imaging, and generative AI for performance. Relevant examples include Rover (2017) and Rover on VROOM (2019), a SIGGRAPH Best Paper-winning project employing lightfield imaging and a robotic camera platform to create an experimental animation studying sites of domestic life; Megahal Grandmommy (2004), a chatbot simulation of a grandmother with Alzheimer's; Three Stage Drawing Transfer (2022), a collaborative human-robot drawing project exploring child-like imagination and generative AI; Beyond the Black Box: A Girl and Her Dog

(IDEAS 2024) a human-robot performance loosely based on Eurydice; and the recent AI Radio Plays (2022-24) and hour long performance Fluid, Feathers, and Flight: Codex ex Machina (2025) a live cinema performance exploring Leonardo Da Vinci's archive through generative storytelling.

Despite years of shared dialogue, this is Fleming and Twomey's first collaborative artwork.

4   Biographies

Jesse Reding Fleming is an artist, technologist, and educator working at the intersection of AI, XR, and contemplative media. His hybrid practice—spanning performance, installation, filmmaking, and tool-building—explores the boundary between self and other through perceptual technologies. He co-founded the Johnny Carson Center for Emerging Media Arts, where he directs the Awareness Lab and teaches in new media art. His work is in the Whitney Museum and Cedars-Sinai collections and has shown at MASS MoCA, the Hammer Museum, and Creative Time. Fleming has directed films for MoMA, the Guggenheim, and Bloomberg. jessefleming.com/ and awarenesslab.io/

Robert Twomey is an artist and engineer exploring poetic intersections of human and machine perception, particularly how emerging technologies transform sites of intimate life. He has presented his work at SIGGRAPH (Best Paper Award), CVPR, ISEA, NeurIPS, the Museum of Contemporary Art San Diego, and has been supported by the National Science Foundation, the California Arts Council, Microsoft, Amazon, HP, and NVIDIA. He is a faculty in Computing in the Arts at UCSD and an Artist-in-Residence with the Arthur C. Clarke Center for Human Imagination, where he directs the Machine Cohabitation Lab. roberttwomey.com and cohab-lab.net.