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The Future is Near: Design Fiction Explorations of Virtual Companions

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Abstract

This workshop should explore virtual companions using design fiction to anticipate ethical, aesthetic, and cultural implications, as well as explore possible evaluation methods for the future of virtual companions. Participants will create speculative narratives to examine future interactions, stereotypes, and societal impact.

CCS Concepts

• **Human-centered computing** → **Interaction design**.

Keywords

Workshop, Intelligent Virtual Agents, Virtual Companions, Design Fiction, Ethics

ACM Reference Format:
Negin Hashmati, Therése Skoog, Mohammad Obaid, Thommy Eriksson, Jean-Arthur Micoulaud-Franchi, and Florian Pecune. 2025. The Future is Near: Design Fiction Explorations of Virtual Companions. In *ACM International Conference on Intelligent Virtual Agents (IVA Adjunct '25), September 16–19, 2025, Berlin, Germany.* ACM, New York, NY, USA, 3 pages. https://doi.org/10.1145/3742886.3758120

1 Overview

Virtual companions, a type of intelligent virtual agent (IVA), have become more common and advanced in the past two years, driven by generative AI and large language models [8, 9]. There is a concern that commercial virtual companions led to ethical issues, particularly regarding privacy, user data, emotional impact, and stereotypical visual representations [6]. This concern has motivated us to propose a workshop on the theme of design fiction for IVA, a method for exploring the future development of virtual companions to identify potential risks and opportunities [7]. Design fiction can also be a co-design activity together with users [1–3].

Relevance of Topic: This workshop is relevant for conference attendees in two ways. First, design fiction is a useful method for exploring emerging technologies such as IVA's, and trying this method together with others is a great way to see its many forms. Secondly, virtual companions is a growing sub-field of IVA with potentially severe ethical issues and therefore deserve attention from a range of viewpoints [5].

Objective: The objective of this workshop is to gather a community of IVA researchers who can continue the work on design fiction. Two themes that could be explored in this workshop are *critiques* and *ethics*; considering, for example, how an agent's appearances affect user trust, how the agent's visual appearance reinforces stereotypes, and reflect on how different cultures accept virtual agents. These research questions will guide the workshop:

RQ1: What could the future aesthetics, cultural nuances, and interactions with virtual companions look like?

RQ2: What kind of constructs are needed to evaluate these future virtual companions?

2 Duration and Tentative Schedule

This full-day, hands-on workshop will follow the double diamond model [4] with the steps of discover, define, develop, and deliver. Table 1 outlines the details of the planned schedule.

3 Expected Outcomes

The expected outcomes are a group of researchers dedicated to continuing the work, ultimately submitting design fiction and speculative design articles to a planned Summer 2026 special issue "Interaction with Virtual Companions and Wellbeing" of the Interaction Design & Architecture(s) (IxD&A) journal, and contributing to a book anthology of design fictions related to virtual companions. The workshop also needs to result in a road map for this work.

IVA Adjunct '25, Berlin, Germany

ACM ISBN 979-8-4007-1996-7/25/09
https://doi.org/10.1145/3742886.3758120

Session	Description
Kickoff and Introductions (30 minutes)	Introduction to the workshop, and participants introduce themselves and give a short summary of the papers they submitted.
Keynote Speaker 1 + Q&A (30 + 15 minutes)	Keynote related to the workshop's themes, with time for a Q&A afterward.
Keynote Speaker 2 + Q&A (30 + 15 minutes)	Keynote related to the workshop's themes, with time for a Q&A afterward.
Interactive Session I: Discover (60 minutes)	Brainstorming in small groups about what kinds of questions they want to raise with the design fictions or virtual agents evaluations, and selection of format, for example: a short written story, storyboard, poster, or a product prototype.
Interactive Session II: Define and Develop (120 minutes)	Participants define what aspect of IVAs they want to focus on in their design fictions. Once this has been defined, they should create the design fictions.
Deliver: Virtual Companion Design Fictions (60 minutes)	The participants present their design fictions and discuss what the future of virtual companions might look like.
Discussion: Evaluation methods for IVAs (30 minutes)	A discussion on what evaluation methods could be used for IVAs based on the deliverables from the design fictions.
Wrap-up and Future Road Map (30 minutes)	We conclude the workshop and highlight the main outcomes, and the participants get to reflect on the topics that were discussed. Closing remarks will decide on actionable further work and collaboration.

Table 1: Workshop Schedule and Description

3.1 Paper Review and Publication Plan

We welcome submissions of research/position papers that are 2-4 pages long (including references). The submission format should follow the conference paper format. We expect 15-20 submissions, and we seek contributions from a range of design fiction topics in relation to IVA. Topics include, but are not limited to:

Evaluating Human-Agent Interactions

- Alternative Quantitative Questionnaires – Discussing existing questionnaires and constructs, proposing new ones.
- Domain Specific Quantitative Questionnaires – Developing domain-specific questionnaires for different applications (e.g., healthcare, education, etc).
- Qualitative methodology – Presenting and promoting qualitative methodology to gather richer insights from users
- Ethical considerations – Developing questionnaires to assess fairness, transparency, privacy, and security in Socially Interactive Agents

Design of Virtual Agents

- Cultural differences in acceptance of IVAs
- Visual representation of agents and how that influences the user interactions
- Speculative explorations of the futures of agents, what the interactions and design of them could look like
- Interactions with agents and how they impact users

4 Organizers

This workshop is organized by a team of interdisciplinary researchers whose knowledge spans the areas of Artificial Intelligence, Design Fiction, Human-Robot Interaction, and Developmental Psychology.

Negin Hashmati is a PhD student in interaction design. Her PhD topic is on virtual companions (or IVAs) and how they affect young people's mental health, using design fiction as one of the main methods to explore the future of this technology. She has experience with conference organization and as a student volunteer.

Thommy Eriksson is a senior lecturer in interaction design, with a PhD in Digital Representation. Thommy has been organizing a number of conferences and workshops over the last 25 years, including the HAI conference three times.

Mohammad Obaid is an associate professor in human-computer interaction. He has co-authored over 100 articles in the fields of HCI and HRI/HAI and has served on several organizing committees at various HCI and HRI conferences. His main research focuses on human-agent interaction and human-drone interaction.

Therése Skoog is a Professor of Psychology, vice dean, and an expert on the psychosocial development of young people. Her research is both basic and applied in nature.

Gemma Serrano is a Full Professor at the Faculté Notre-Dame and at the Institut Supérieur de Sciences Religieuses. Doctor of Theology, she heads the Digital Humanism Department at the Collège des Bernardins. Her research focuses on two main areas: first, the relationship between theology and technology, and second, the ethics of AI, focusing especially on narratives surrounding these technologies and their aesthetical, political, and spiritual implications.

Jean-Arthur Micoulaud-Franchi is a psychiatrist, full professor of physiology at Bordeaux University, and deputy head of a sleep medicine department. His research focuses on the intersection of psychiatric manifestations, sleep disorders, and digital health, with a particular interest in the role of encounter in clinical decision-making. He actively contributes to interdisciplinary projects integrating phenomenology, narrative medicine, and computational modeling.

Florian Pecune is a junior professor at Sanpsy, Bordeaux University. He holds a Ph.D. in computer science from Telecom Paristech, and his research primarily explores the intersection of human-computer interaction, digital health, and dialog systems. Since 2020, he has actively contributed to the organization of the IVA conference in various roles.

Acknowledgments

Thank you also to Gemma Serrano from Collège des Bernardins.

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