

Report: Micro-project

Project Details

Title: Artist Researchers In Residence (TAIGA)

Tagline: AI Artist Researcher in Residence at UmArts

TAIGA Focus Area: AI & Arts

Start date: 7 January 2025 End date: 31 January 2025

Responsible person(s): Ylva Frenaeus (Dep. Director), Clara West

(Research coordinator, Maria Bylund (Finance)

Summary A brief overview of the project, its purpose and implementation.

The UmArts Artist Researchers in Residence Programme (ARIR) provides the opportunity for artists and makers to contribute to the UmArts research environment for one month. The ARIR TAIGA artists was invited to develop a new short term project in the UmArts research studio that investigate Artificial Intelligence and Machine Learning as part of the UmArts Art and AI Working Group. The ARIR programme focuses on interdisciplinary practice-based researchers from the visual arts, sound arts, media arts, performing arts, architectural, design, maker and hacker communities. The selected artist 2025 was Cyanne <u>van den Houten</u>. The selection panel saw a great potential in Van den Houtens research methods and that theise methods would strongly influence the UmArts community, the UmArts Art & AI working group and a wider group of researchers within the UmArts and TAIGA network. Van den Houten's interest of exploring bias form of queer perspective was an rich contribution to the discourses of ethics and politics of AI within the Arts and AI working group and the TAIGA context.

Van den Houten residency period was between the 7 january to the 31 January. Beforhand van den Houten send us a research and workplan for the four weeks. In this way, we were able to fruitfully prepare meaningful meetings and interactions between Cyanne and several parties within the network.





Van den Houten's project **aleatory.agent** was a micro-AI-project that integrates algorithmic chance into the creation of visual art through computer-controlled machines. Unlike conventional generative AI tools, the project focusses on embodiment and audience interaction, making the creative process a intuitive experience between people and generative AI systems. It embraces unexpected outcomes by random and controlled variables in image and text generation, using algorithms as the primary creative and performative force.

The project explored the aesthetic and ethical dimensions of collaborating with AI, addressing questions of agency, authorship, and control. The research question was: "Is it possible to use chance-based interventions to expose biases embedded in pretrained algorithms, and does this reveal the potential ethical concerns?" Van den Houten tried to search for intuitive interfaces, extended embodiment and queer expression of the machine. Through reflection and play, it invites participants to engage with new dynamics of creativity, co-creation and a hacking mindset.

Method

Describe the method used to implement the project. What specific activities and work were carried out to achieve the project objectives? Who were involved in the project?

Before coming to Umeå Cyanne wrote an <u>action plan</u> for the research period. She also set up a web page so that anyone interested in the project could follow her work an progress during the residency. Several meetings with researchers at Umeå University and presentation by Cyanne at different places was set up before arriving to Umeå. People involved in the project was the invited artist researcher Cyanne van den Houten, her collaboration partner Ymer Marinus and Rickars Åström, Umeå institute of Design.

By positioning herself as a node in the network of creative computers, She aimed to interrogate the politics and aesthetics of AI. This approach was vital due to the significant gap between public expectations of AI capabilities and its actual nature, requiring demystification for a clearer understanding of the present and the role of real AI's in decision—making and responsibilities. Differentiating between myths and utopian scenarios is crucial by making AI tangible and relatable. Through the micro-expeirments she tried to investigate, experiment and reflect on the creative potential of these techniques.

This is the workingplan and methods used to carry out the project:





Mode 1- Surrealistic games developing new methodologies to interact with generative AI (and computer controlled machines) in a meaningful way. Van den Houten finish an (open source) game with digital applications that help herself and others to think, play and reflect on shared authorship with machines. Similar to a score, the game provided instructions or recipes for algorithms and humans, encouraging collaboration between human and computational creativity and processes.

By integrating randomness and participatory elements in the games there is a place to explore the intentionality and (un)predictable nature of algorithmic creation; they are meant to be played with machines.

Mode two- Empodied agents was to embracing tools and micro-controllers. It brought the experimental self-built applications generating works beyond human control into her travelling own lab of a 3D printer, sensors and microcontrollers.

It investigated how she could be able to execute visual works in realtime and materiality.

Mode three- AI Instrument had a focus on the embodiment of AI tools. As the final step of the residency she wanted to develop a prototype of an instrument that brings randomness, expression and emotion as parameters into the creation of automated creation. The instrument would be a sculpture itself, its shape was defined by the experimental outcomes of mode 2. The instrument measured data with the help of sensors and the incoming data and influenced the AI generation of new visual works.

Results

Describe the results and achievements reached during the project, emphasizing its transdisciplinary aspects. Include quantitative and qualitative data that support the progress and success of the project and established collaborations. Links to articles written, or conferences organized may be mentioned, linked, or attached in this section.

Examples of outcomes

One of many outcome of the micro project became a sensor-driven instrument that allowd the audience to influence randomness intuitively. This instrument guided the audience and AI in real-time creation, blending spontaneity with deliberate interaction to shape the collaborative process.





Cyanne van den Houten and Ymer Marinus hosted a <u>Thinkering session</u> and <u>Open studio at UmArts research center</u> in the end of the residency. This event and small exhibition join together people from different departments such as Dept. of Architecture, dept. of Law, HumLab, dept. Of Computering Science and Umeå institute of Design. At the event van den Houten presented her work and let the audiens play with the different outcomes of the project.

Cyanne also presenter her research at:

- the Art and AI working group meeting (14 jan 2025)
- <u>HumLab Share</u> (22 jan 2025)
- RAI group meeting by invitation by Virgina Dignum (28 jan 2025)

Following up from the residency, van den Houten will visit us again in September and engage with design students and prepare for other future research collaborations with the UmArts Departments.

Resource allocation

In this section, provide an overview of how the allocated resources were utilized throughout the project duration. Deviations from the budget should be explained.

- 1. Personnel costs (inc. Overhead): 53046SEK
- 2. Material costs: 25500 SEK
- 3. Travel costs: 6475 SEK
- 4. Other costs (specify): Accommodation 9295 SEK

Evaluation

Reflect on how well did the project meet its objectives and contribute to TAIGA's overall objectives in the connected focus area? In addition to the concrete outcomes, what other results or unexpected findings and key takeaways for the future, were observed during the project?

Our hope was that this micro project would lead to publications and/or artworks and in the near future collaborations with one or more affiliates with UmArts and the TAIGA framwork. The Thinkering session (27 jan 2025) was one of the most visited events in art and AI that UmArts has arranged. Her work and method created many new contacts amongst researchers at Umeå University. UmArts are working on funding for further collaborations with Cyanne. Both curator Sarah Cook and Director of the Bildmuseet, Katarina



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Pierre, were very impressed by Cyanne's work, method and expression. Discussions are currently underway about/how/if Van den Houten can be part of the large Exhibition on Art and AI that is planned at the Bildmuseet starting in March 2026.

Responsible person(s)	Date: