

## Morana Alač: Laboratory Beyond the Laboratory

This talk will report on an ongoing and long-term observational study of a machine learning university laboratory. As part of the study, my attention is directed toward one of the laboratory's research projects focused on social robots. In this project, researchers design educational robots geared toward children between 18 and 24 months of age. While they develop the computational architecture, the researchers immerse the robot in a preschool setting with a goal of designing a robot that can function autonomously. They employ their observations of the preschool's events to guide the robot's design and prove the robot's autonomous functioning.

Following the tradition of laboratory studies, my broad interest is in the everyday work of science. As I observe local practices that comprise actual situations in robotics research, I specifically focus on multisensory action and multimodal interaction in engagement with technology. I pay attention to touch, spatial organizations, and how communicative modes, such as gesture, speech, gaze and body orientation, feature in technologically enhanced work of researchers. In accordance with the maxim to "follow the actors themselves," while observing the researchers' work at the university, I end up also observing the events at the preschool. There, I look at how the researchers, in coordination with children and their teachers, engage robots as a part of the everyday actions and interactions in that setting.

In this talk I will discuss the events at the preschool. The researchers see the preschool as an extension of the laboratory as well as a way to take the robot "beyond the laboratory." In that sense, the focus on the preschool will allow me to address the conference's theme. I will show videotaped excerpts from actions and interactions to give a sense of the preschool's indigenous methods in engaging with social robots. These methods indicate that robot's functioning is situationally sensitive to its spatial positioning, its relationship with the designers and other equipment, as well as the relations among those who engage with it. In other words, the robot's functioning "beyond the laboratory" indicates features of the laboratory. I will suggest that to imagine and possibly evaluate "beyond the laboratory" of social robots, the questions concerning ethics, agency, social status and robots' potential capabilities of companionship and care must take into account the places where the robots currently live. Those places are the laboratories.