The proposed project Systemic Thinking across Scales aims to foster new ways of teaching and research at Aalto University grounded in a holistic understanding of the relation between architecture, urban design, and landscape architecture and the interaction of these scales of the built environment in order to formulate visions and answers to increasing challenges we are facing in the future.

As part of the strategic partnership between Aalto University and SUTD, this project will help to setup mobility initiatives between the Department of Architecture of Aalto University and the Architecture and Sustainable Design pillar of SUTD. In addition, with its goal of establishing a common PhD research the project will function as seed for an international competence center located at Aalto University and SUTD on a systemic understanding of our built environment. The project will connect teaching with research and will serve the needs of an increasingly urbanized Finnish society.

The activities are divided into the following five main elements: I > preparation workshop at SUTD in October 2019 / II > master thesis seminar (spring semester 2020) / III > joint design studios in collaboration with SUTD (autumn semester 2020 & autumn semester 2021) / IV > master thesis/PhD seminar (spring semester 2021) V > reflection/evaluation seminar at Aalto University in December 2021
The main outcomes of the joint design studio is twofold: the development of a pedagogy for computational design thinking as well as the establishing of an effective way of remote teaching based on setting-up an immersive collaborative design/communication platform.

Applicability of the results: The exploration of an immersive collaborative design/communication platform is a first step in overcoming the need for interaction with the design object during the design process. Immediate application of the results of the project are produced by the design explorations within the joint design studios.

Long-term plans: Due to the high global relevance of the overall research topic of the project, a continuation beyond the project phase is a fundamental goal of the current planning phase. Supporting the international success of Aalto University by developing this initial collaboration between a group of academics further into an internationally visible competence center is the aim.