

RESEARCH THEME

XLII Cycle – a.y. 2026/2027

Title of the doctoral research	Mobility Futures: rethinking automotive experience design towards the naturalness of interaction between driver and car
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Proponent professor	Marco Ajovalasit
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Abstract	Automation is advancing rapidly, and autonomous vehicles will soon become a reality on public roads. This research addresses a key challenge for their adoption: how to ensure that autonomous vehicles are accepted and appreciated by the general public. Autonomous vehicles pose a unique design problem due to their lack of historical precedent, making them unfamiliar to most users. While familiarity and simplicity are well-established principles in successful product, system, and service design, their application to autonomous vehicles remains unclear. It is therefore crucial to understand which characteristics and behaviours may be perceived as “natural” in this new context. This study investigates the physical, psychological, and sociological dimensions of “naturalness,” building on previous research on conventional automobiles while extending it to autonomous systems with more anthropomorphic qualities. It examines how interaction with autonomous vehicles differs from traditional driving experiences. The research explores mental constructs such as intuitiveness, meaningfulness, naturalness, trust, control, free will, and ethics, as well as user stereotypes related to non-verbal and verbal communication in both conventional and autonomous vehicles. The outcome will be a set of criteria to evaluate whether interaction with an autonomous vehicle can be considered “natural,” together with design guidelines to integrate these criteria into the automotive design process.
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Keywords	human-centred design, meaning, automotive ux
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