Human factors considerations for cooperative positioning using positioning, navigational and sensor feedback to calibrate trust in CAVs

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Abstract	Given the complexities involved in the sensing, navigational and positioning environment on board automated vehicles we conduct an exploratory survey and identify factors capable of influencing the users' trust in such system. After the analysis of the survey data, the Situational Awareness of the Vehicle (SAV) emerges as an important factor capable of influencing the trust of the users. We follow up on that by conducting semi-structured interviews with 12 experts in the CAV field, focusing on the importance of the SAV, on the factors that are most important when talking about it as well as the need to keep the users informed regarding its status. We conclude that in the context of Connected and Automated Vehicles (CAVs), the importance of the SAV can now be expanded beyond its technical necessity of making vehicles function to a human factors area: calibrating users' trust.
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