# Trust Me Bro: An Innovative Approach to Strengthen Inter-Agent Trust in Collaborative Multi-Agent Systems

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## Abstract

In this paper, we propose a novel framework to assess and enhance trustworthiness in multi-agent systems. The omnipresence of such systems in a variety of domains, including autonomous vehicles, supply chain management, and distributed computing, has accentuated the need for effective mechanisms to ensure reliable inter-agent collaboration. However, the inherent challenges posed by dynamic environments and non-deterministic agent behaviors have stymied the development of robust trust models.