Evaluation of the EVITA_TARA Model in the Automotive Industry Using the VCAT Tool

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Abstract:

TARA, which stands for Threat Analysis and Risk Assessment, is a fundamental first stage in cybersecurity for the automotive industry. Numerous TARA models have been introduced to align with industry standards, with EVITA being one of the prominent models mentioned in ISO/SAE 21434. EVITA comprehensively models threats associated with vehicular systems and assesses their severity and feasibility, making it one of the most thorough models available. However, since EVITA is based on European best practices, it is crucial to evaluate whether it meets Canadian standards. In this study, the VCAT (Canada Vehicle's Cybersecurity Assessment Tool) has been employed to assess the EVITA model. VCAT is a tool designed to evaluate risk assessment projects based on Canadian criteria, and it was specifically used to analyze the risk assessment phase of EVITA.