

Mark Vernacchia

Mark A. Vernacchia is a GM Technical Fellow and is the principal system safety engineer for all GM propulsion systems worldwide. He has been listed as an inventor on over 20 awarded patents during his time at General Motors. Mark earned a BS in Mechanical Engineering from Purdue University and an MS in Engineering Sciences from Rensselaer Polytechnic Institute (RPI). Mark is a professional engineer in the State of Michigan and is recognized as an Expert Systems Engineering Professional (ESEP) by the International Council of Systems Engineers (INCOSE). Mark chairs the task force which created the SAE J-3187 Recommended Practice for applying System Theoretic Process Analysis (STPA) to automotive applications. SAE J-3187 also provides educational material for applying STPA within a safety assessment process. Other application sectors could also benefit from this work. The task force that created this document consisted of over 40 different groups, with more than 60 members, who came together to contribute their STPA "practitioner" experience from a variety of industries.