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Keynote Speech

TRIZ and Creativity Future in the AI Era

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Speaker Biography:

Ms. Zusman is a certified TRIZ Master, one of the leading developers of the TRIZSoft® family of software, Ideation Office of Innovation and Complexity Management Tools. She is an instructor in all its applications. She received her TRIZ education from the TRIZ founder Genrich Altshuller and has over 40 years of TRIZ experience, including participating as a fellow instructor in seminars conducted by Mr. Altshuller during 1983-1986. She co-authored multiple books (including several with Mr. Altshuller), patents, and papers and taught TRIZ to thousands of students worldwide.

Abstract/Outline

Our previous reports acknowledged a unique situation with the parallel evolution of TRIZ and AI during approximately eight decades. We also addressed some ways one contributed to and benefited from the other. Today, we would like to share our vision of the future of TRIZ and creativity in the AI era.

One of the most potent and relatively straightforward Patterns of evolution is the hybridization of two systems. We recognize that TRIZ is an AI system, a unique one that aids users in generating innovative solutions to a myriad of problems and tasks. This recognition opens the possibility of applying hybridization to TRIZ and publicly available AI Chatbots, two AI systems with contrasting strengths and weaknesses as follows:

- TRIZ: ability to help deliver creative solutions (+); insufficient user-friendliness interface and labor consuming process (-).
- AI Chatbots: good user interface with fast response (+); poor ability to deliver creative solutions (-). So far, the randomization (temperature) feature is in the infant stage.

While it is our firm belief that TRIZ can significantly improve the core AI technology (some practical solutions have led to the development of PANN, a previously addressed new type of Artificial Neural Network, here we will focus on the ability of the AI Chatbots, AI Tools based on Large Linguistic Model (LLM), to boost the evolution of TRIZ in the aspects of a) new products (already available and following generations); b) advancements to TRIZ analytical and knowledge-based tools and the system of Patterns /Lines of evolution and c) new insights into general and creative thinking.