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Artificial Intelligence for Safety Related Aviation Incident and Accident Investigation Scenarios

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Abstract : With the tremendous improvements in the processing power of computers, the possibilities of artificial intelligence will increasingly be used in aviation and make autonomous flights, preventive maintenance, ATM (Air Traffic Management) optimization, pilots, cabin crew, ground staff, and airport staff training possible in a cost-saving, less time-consuming and less polluting way. Through the use of artificial intelligence, we foresee an interviewing scenario where the interviewee will interact with the artificial intelligence tool to contextualize the character and the necessary information in a way that aligns reasonably with the character and the scenario. We are creating simulated scenarios connected with either an aviation incident or accident to enhance also the training of future accident/incident investigators integrating artificial intelligence and augmented reality tools. The project's goal is to improve the learning and teaching scenario through academic and professional expertise in aviation and in the artificial intelligence field. Thus, we intend to contribute to the needed high innovation capacity, skills, and training development and management of artificial intelligence, supported by appropriate regulations and attention to ethical problems.

Keywords : artificial intelligence, aviation accident, aviation incident, risk, safety
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