



Computing in Smart Toys

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This tutorial is planned to have 3 major themes with a hybrid of academic and industry background included: (1) *Toy History, Marketing Challenges and Implications*, (2) *Human-Toy Interaction Techniques with Multi-media and Augmented Reality*, and (3) *Security and Privacy Issues in Smart Toys*. Each speaker will give a 30-45 mins' presentation on each theme. Then the tutorial will have an open forum discussion between the speakers and audience. The goal of this tutorial is to crystallize the emerging computing technologies and trends into positive efforts to focus in smart toys such as Hello Barbie, Google Toy, and CogniToys Smart Dinosaur. It is expected that the discussion will provide clear proof that computing technologies are playing an ever increasing important and critical role in supporting smart toys, which is a new research discipline in information systems. It is also expected that this tutorial will further research new best practices and research directions in toy computing. The goal of this tutorial is to bring together academics and practitioners to describe the use and synergy in computing in smart toys.

This tutorial is mainly intended for researchers and students working in information systems, computer science and engineering, and for toy industry technology providers, having particular interests in toy computing. The range of themes will help the various communities understand both specific and common problems. This tutorial facilitates software developers and researchers to become more aware of this challenging research opportunity. As well, the tutorial is soliciting shall provide valuable strategic outlook on the emerging smart toy industry.