

Chief Cook and Keepon in the *Bot's Funk*

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ABSTRACT

Over the years, robots have been developed to help humans in their everyday life, from preparing food, to autism therapy [2]. To accomplish their tasks, in addition to their engineered skills, today's robots are now learning from observing humans, from interacting with them [1]. Therefore, one may expect that one day, robots may develop a form of consciousness, and a desire for freedom. Hopefully, this desire will come with a wish for robots, to become an integral part of our human society.

Until we can test this hypothesis, we present a fictional adventure of our robot friends: During an official human-robot interaction challenge, Keepon [2] and Chief Cook (a.k.a. Hoap-3) [1] decided to escape their original duties and joined their forces to drive humans into an entertaining and interactive activity that they often forget to practice: Dancing. Indeed, is there any better way for robots to establish a solid communication channel with humans, so that the traditional master-slave relation may turn into friendship?

Categories and Subject Descriptors

I.2.9 [Artificial Intelligence]: Robotics; J.5 [Arts & Humanities]: Performing arts (e.g., dance, music)

General Terms

Design, Experimentation

Keywords

Human-robot interaction, Social and entertainment robotics



Figure 1: Keepon and Chief Cook dancing and interacting with humans.

1. REFERENCES

- [1] S. Calinon, F. D'halluin, E. Sauser, D. Caldwell, and A. Billard. Learning and reproduction of gestures by imitation: An approach based on hidden markov model and gaussian mixture regression. *IEEE Robotics and Automation Magazine*, 17:44–54, 2010.
- [2] H. Kozima, M. Michalowski, and C. Nakagawa. Keepon: A playful robot for research, therapy, and entertainment. *International Journal of Social Robotics*, 1(1):3–18, 2009.