

HOME RENAISSANCE FOUNDATION WORKING PAPERS Number 101

Artificial Intelligence-Empowered Technology in the Home Matilde Santos and Francesca Toni

Paper delivered at Home Renaissance Foundation III Experts Meeting: 'The Home in the Digital Age'', The Royal Society of Medicine, London 25-26 February 2019

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Abstract

Nowadays Artificial Intelligence (AI) is playing an increasingly important and seemingly ubiquitous role in society, with applications ranging from autonomous cars to decision-support in healthcare and law, to mention some. But what is the impact of AI in the home, and how are its inhabitants benefiting from AI in this time and era? This overview will focus on AI-empowered technology in the home, along two dimensions: management of the home (including smart devices and domestic robots) and knowledge enrichment (including information gathering and question answering, e.g., via chatbots). We evaluate available technologies as to the functionalities they deliver and the AI methodologies they deploy, and consider possible future developments, including benefits and threats, as the AI-supported functionalities become more sophisticated with time and additional research and industrial investment are channelled into empowering home technology with AI.

*Full paper

See book 'The Home in the Digital Age'