

# Palabras de S. M. el Rey en la inauguración de la International Conference on Intelligent Robots and Systems-IROS`2018

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Ladies and gentlemen, good morning and greetings to everyone attending the IROS 2018 Conference that kicks-off today here in Madrid.

Allow me to commence by giving a warm welcome to Spain to all those who have travelled from abroad for this exciting international conference, which certainly is a key event in the fascinating field of robotics and artificial intelligence. It is a great pleasure to have you here with us and we feel proud to host this conference for the first time.

But before I get into the subject, and since this is mostly an international event, I would like to publicly express my deep sorrow and solidarity, in the name of all Spaniards to the people of Indonesia, who have suffered —and still do— the tragic and horrific effects of the recent earthquake and tsunami.

*La celebración de la conferencia IROS'2018 en Madrid nos alegra de verdad y supone un muestra clara de la idoneidad de nuestro país como lugar para el encuentro y el intercambio de conocimiento y experiencias. También lo es del compromiso de nuestras instituciones, empresas y de toda la sociedad con los avances científicos y tecnológicos más punteros e innovadores.*

*De este modo, y por todas estas razones, podemos decir que tradición, hospitalidad, apertura y modernidad convergen así en un mismo espacio físico.*

This international conference on robotics enables us to look ahead of our time, to gaze towards the society of the future; a society in which robotics and artificial intelligence, adequately developed, should contribute to our growth and to the improvement of our social well-being. Without question, those areas of knowledge and technology (robotics and artificial intelligence) have spilled out of the sphere reserved for experts, and are becoming increasingly present and relevant to virtually every aspect of our lives, helping to transform the way in which we learn, work, shop and communicate.

It is true that many of these technologies have been with us for a long time now, but since the past decade, the proliferation of data and improvements in connectivity —including mobility— and in microprocessors have created the necessary conditions for their widespread use. The advances made in technologies such as Machine Learning and —specifically— Deep Learning, have intensified the number and diversity of possible applications, thereby increasing their technological and economic significance; in parallel —as we well now— raising concerns and need for measures to adapt and to ensure this is a good advance for society.

Robotics and artificial intelligence are widely used technologies that have the potential to improve our performance in economic sectors such as energy, manufacturing, health, agriculture, logistics, transport and security. And, as has been mentioned on other occasions, their widespread use will enable us to tackle challenges, such as the low productivity of production factors –generating higher economic growth rates– or to effect improvements in areas such as medical care, like making diagnoses and prescribing treatments very quickly and with very high levels of effectiveness.

Throughout history, it is an undisputed truth that many of the greatest socio-economic changes have been driven by technology and innovation. The effect of what has occasionally been termed as destructive creation has generated temporary imbalances that have given rise to debates regarding the threats underlying technology. However, the substitution of human labor with machine labor has always been offset by a rise in efficiency and productivity, and by the creation of new occupations and tasks, many of which could not have been envisaged at that time, driving increases in growth and improvements in employment and quality of life.

The question, this time around, is the rate at which this is happening –and will increasingly do so– as we move on. Will the destruction of old jobs be adequately met by the creation of new ones? Are we capable to shut-off or deal with once again those imbalances and the anxiety they generate in our societies?

Therefore, we ought to view technology again as a tool that will enable us to supplement our capabilities and facilitate our growth as individuals and as a society. These technologies will drive the solutions to many present and future challenges, such as ageing, dependence, or the demographic challenge, and will generate business opportunities as well as opportunities for economic growth.

However, these technologies also have a particularity that sets them apart from others: they have cognitive capabilities that enable them to perceive their environment, to process information, to learn and to act. Consequently, we can only benefit from these technologies if the systems in which we co-exist are compatible with the principles and values that define us as a society.

Our development as individuals, the exercise of our rights and freedoms, and the improvement in our well-being must define the lines along which these technologies are designed and deployed. Only in this way will we be able to draw on their potential to free us from the most arduous and harmful activities, to deter enough the risks of abuse or mis-use and to improve our quality of life.

*En este contexto, quiero decir que España cuenta con los elementos necesarios para formar parte de los líderes en el campo de la robótica, disponemos de amplias infraestructuras digitales, una importante actividad emprendedora, empresas punteras en múltiples sectores económicos, universidades de prestigio y la capacidad de desarrollar y atraer talento tecnológico y digital.*

*Tenemos, pues, que apostar decididamente por la adopción de tecnologías como la robótica y la inteligencia artificial para garantizar un futuro con un crecimiento económico inclusivo y sostenido, con empleo estable y de calidad, y con altos niveles de bienestar social.*

I would like to conclude these brief remarks by wishing you every success in your endeavors, and a very happy stay in our Nation's capital, Madrid.

And now, it is truly a distinct honor for me to declare the International Conference on Intelligent Robots and Systems IROS 2018 officially open.

Many thanks.