

THE USE OF ARTIFICIAL INTELLIGENCE IN ROAD SAFETY



Capacity Building & Globalization in Mechatronics World

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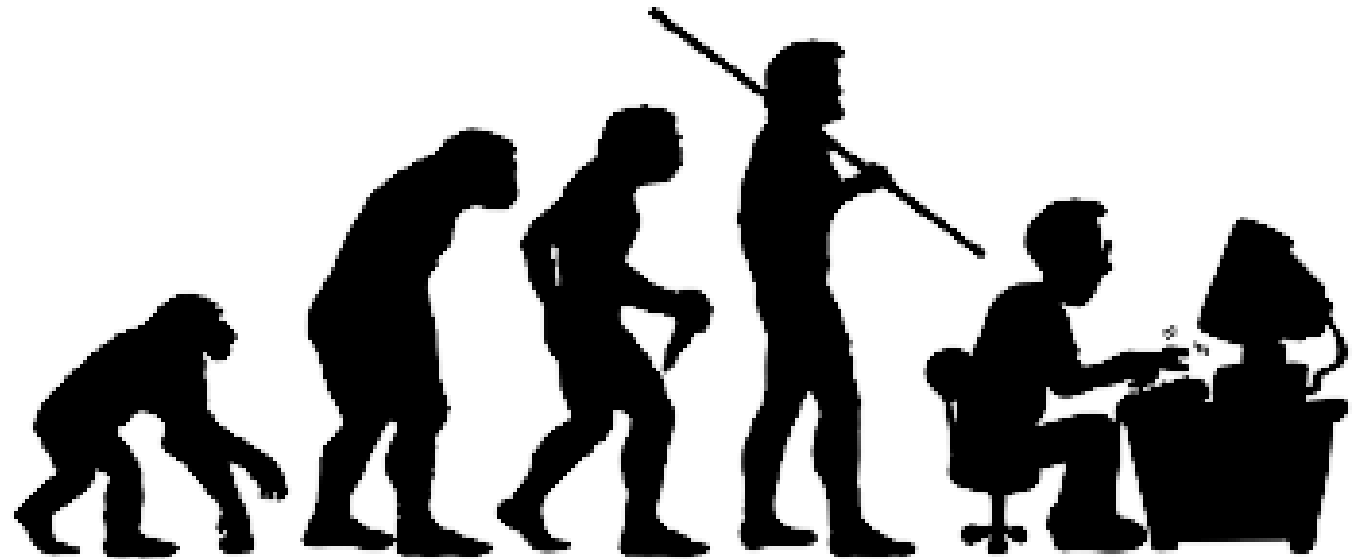


Introduction

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Life has constantly revolved to reflect the changes of modern times and the quest for human advancement. Through the ages, knowledge driven human endeavours have progressively engendered improvements in the quality of life.

The instrumentality of Science and Technology has been deployed to man's advantage in overcoming human mobility challenges seen as a critical factor for development.



Introduction (Cont'd)

Advances in technology to meet human needs and general improvements have resulted in the sprouting of various branches of Science and Technology such as “**mechatronics**” to revolutionize certain aspect of life such as **auto-mobility**.



1879 Nicolas-Joseph Cugnot of France
steam-powered tricycle .



A De Dion Motor Car, C.1901
Library of Congress, Washington D.C



Leaf, Nissan Motor Co.'s Zero-emission
electric vehicle, 2009

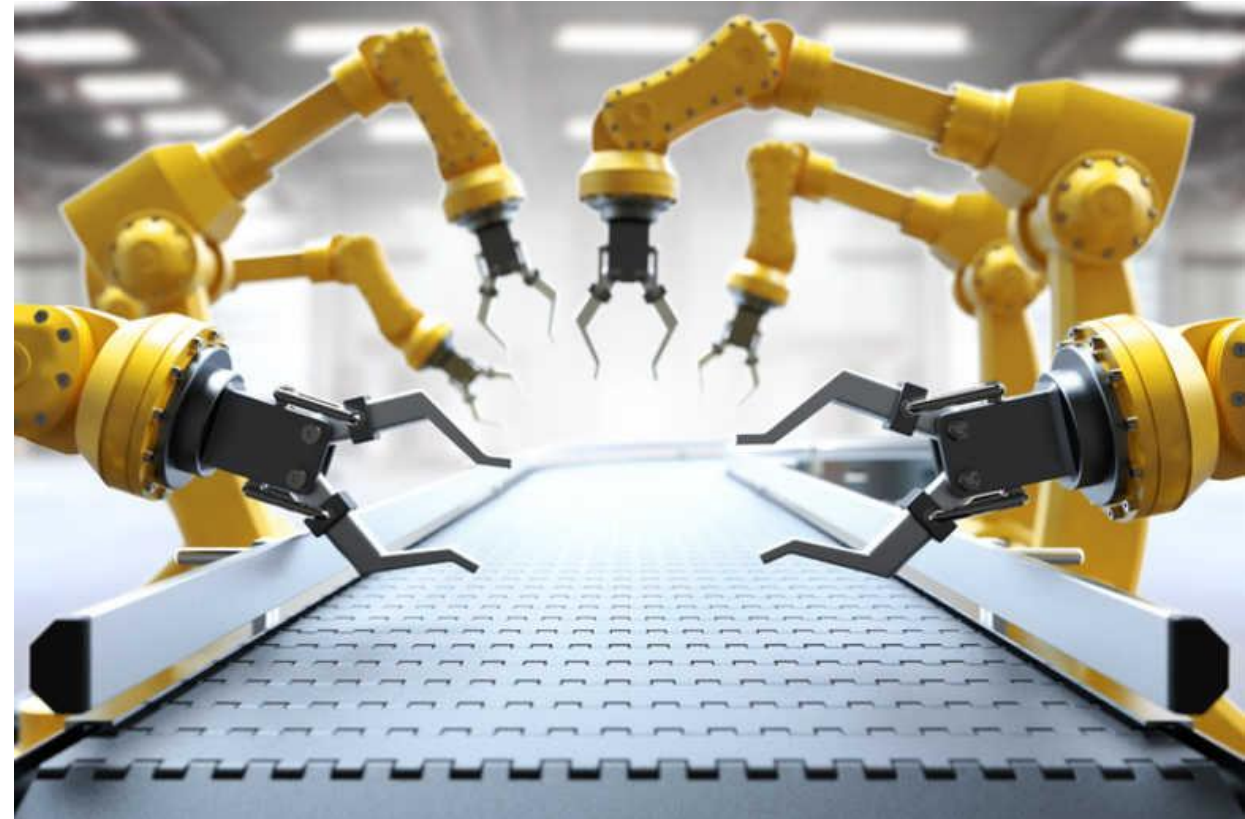
Mechatronics: A Unique Field of Engineering



Mechatronics: Generation, the Need and Values

The Generation

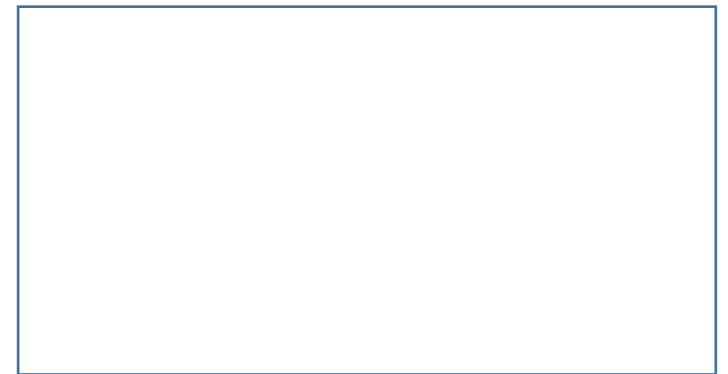
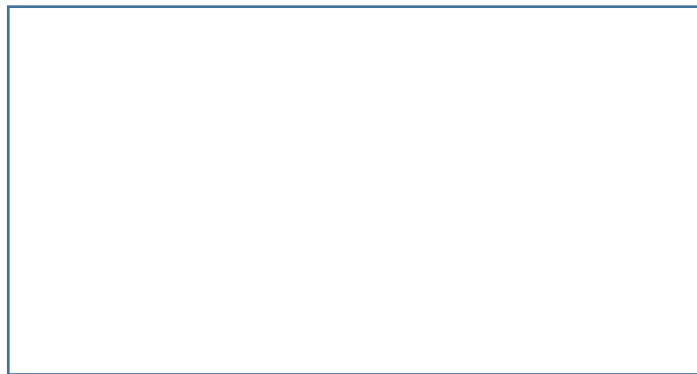
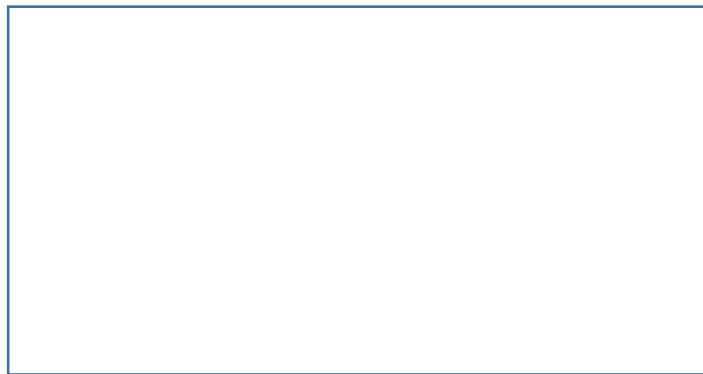
Mechatronics is a multidisciplinary branch of engineering that focuses on the engineering of both electrical and mechanical systems, and also includes a combination of robotics, electronics, computer, telecommunications, systems, control, and product engineering.



Mechatronics: Generation, the Need and Values

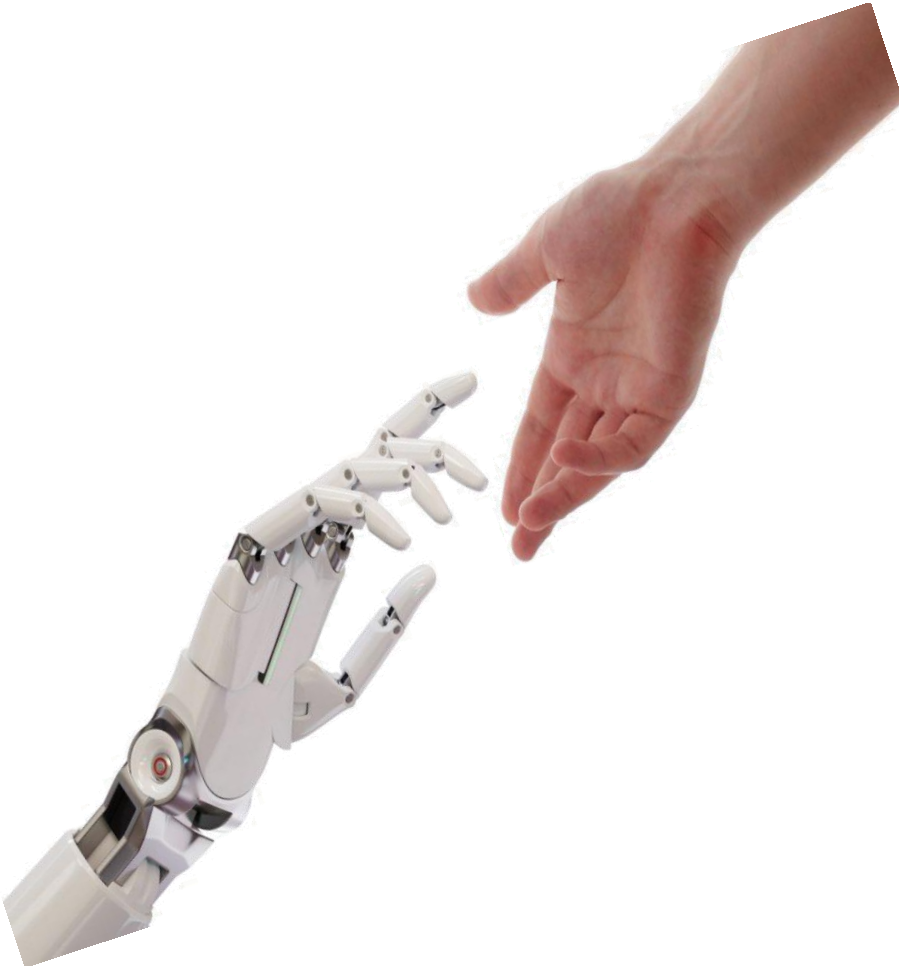
The Need

Steering from the pressures of development to automate processes, replicate human actions, safeguard lives and make life more livable, inclusion of Artificial Intelligence (AI) in robotics, manufacturing and assembly lines have proven beneficial as production efficiency has improved greatly.



Mechatronics: Generation, the Need and Values (Cont'd)

The Values



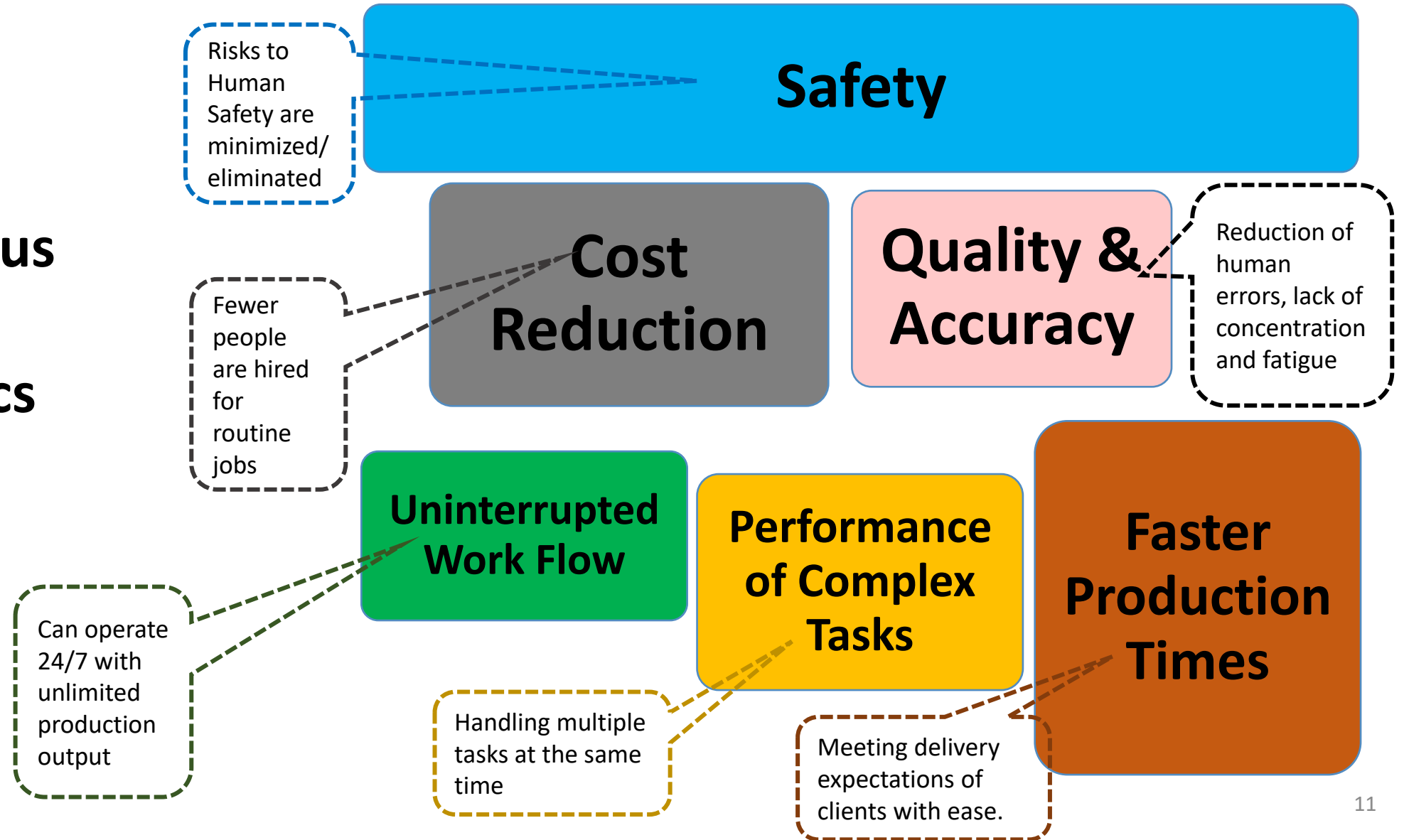
It is estimated that by the end of year 2019, over 1.4 million new **Artificially Aided (AI)** systems would be established in factories all over the world.

The drive for increased involvement of robotics in human activity is borne out of the many benefits it brings to man and society.

Mechatronics: Generation, the Need and Values (Cont'd)

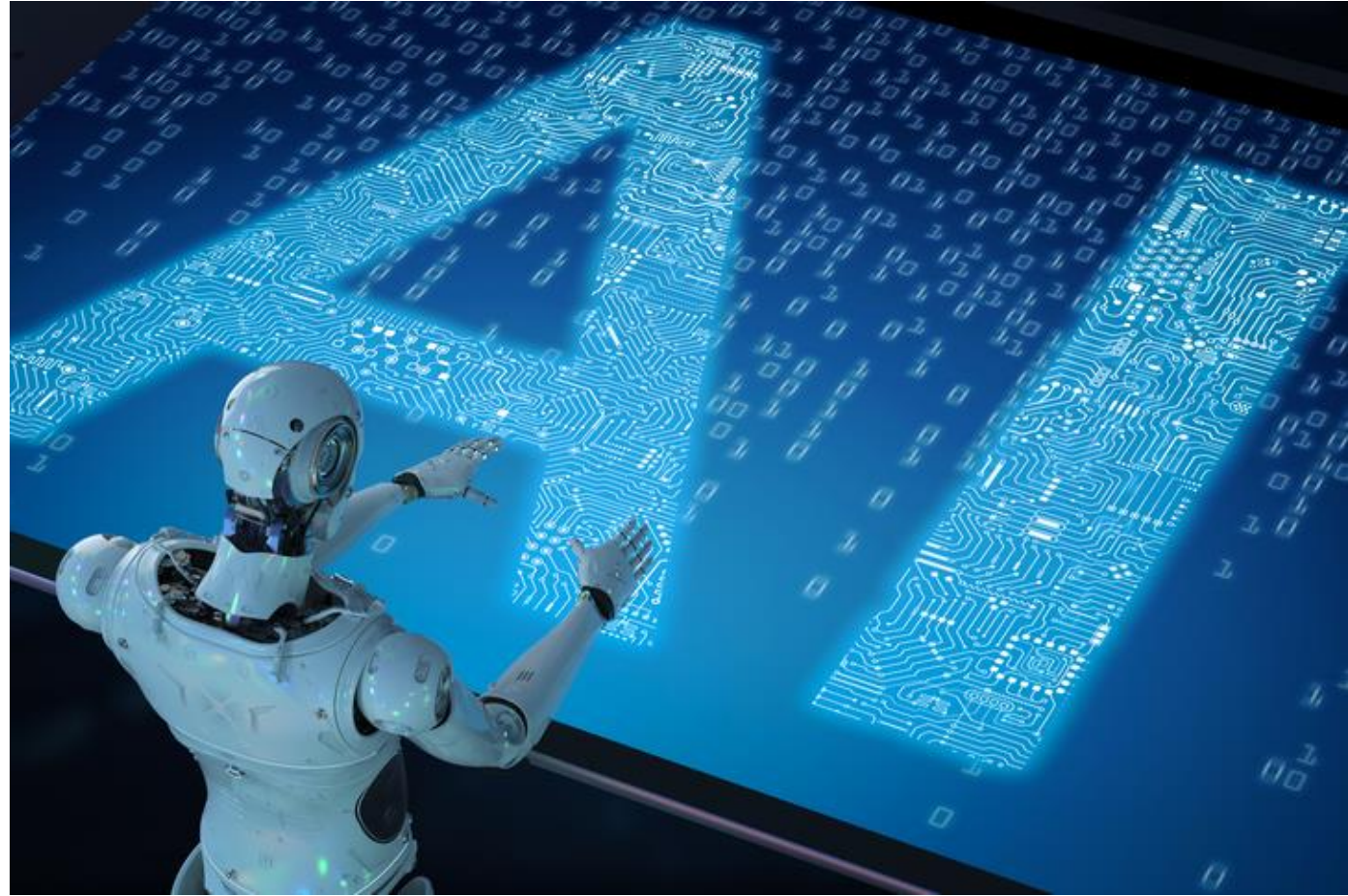
Benefits

The numerous benefits of Mechatronics includes:



Conceptual Framework: Artificial Intelligence and Road Safety

Advances in technology to meet human needs and improve the general quality of life has resulted in the sprouting of various branches of Science and Technology.



Conceptual Framework: Artificial Intelligence and Road Safety (Cont'd)

Advances in technology to meet human needs and improve the general quality of life has resulted in the sprouting of various branches of Science and Technology.

Artificial Intelligence and Road Safety



Mechatronics: The Way Forward on Road Safety



<https://technext.ng/2019/07/09/unns-mechatronic-team-produces-first-nigerian-made-electric-car/>

Mechatronics: Generation, the Need and Values



THANK YOU

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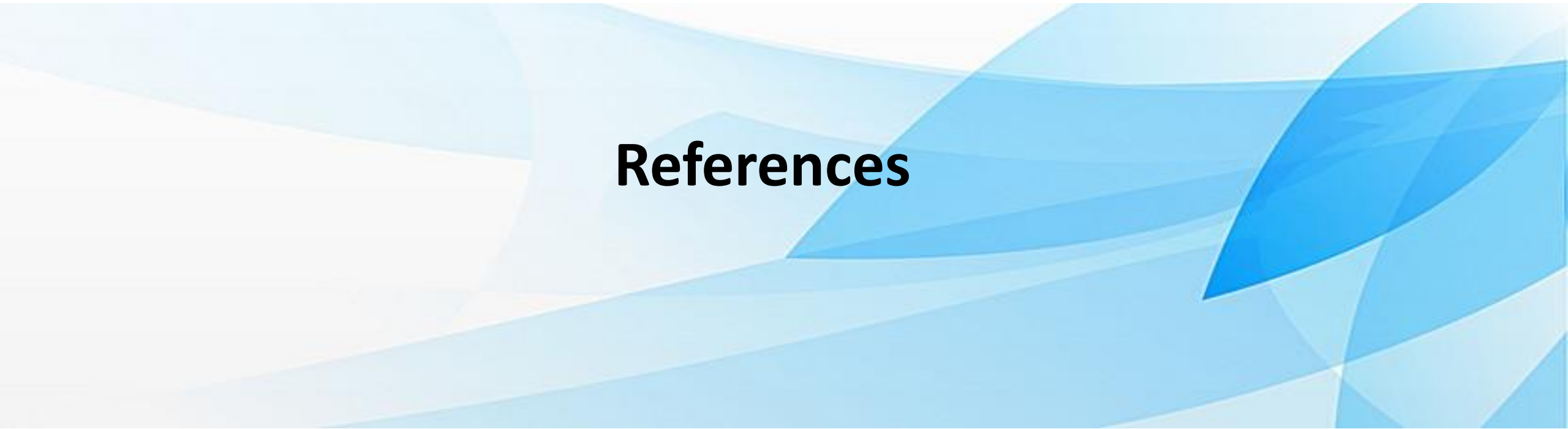
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References

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