

# 5<sup>TH</sup> WORLD MACHINE LEARNING AND DEEP LEARNING CONGRESS and

## WORLD CONGRESS ON COMPUTER SCIENCE, MACHINE LEARNING AND BIG DATA

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### Deep learning: An application of machine learning to classify images

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Living in the 21<sup>st</sup> century, mankind's most powerful weapon is technology. The field of technology we are interested in is computer science, specifically Artificial Intelligence (AI). As the name suggests, AI is about turning devices into intelligent agents that take actions based on the environment they perceive. They are also flexible in terms of changing their goal- what they are meant to do as well as adjusting their actions depending on its changing environment. What makes AI agents peculiar is their ability to learn and remember from their mistakes. Furthermore, Machine Learning (ML) is one of AI's applications that enable systems to learn automatically, improve through experience and adjust its actions without human intervention. This takes us to Deep Learning (DL), a new subfield of ML concerned with algorithms inspired by the structure and function of the human's brain called artificial neural networks. It has networks which are capable of learning data obtained from instructed or unlabeled data; therefore it is also known Deep Neural Network (DNN). All those terms lead us to what we are mostly interested in, Convolutional Neural Networks (CNNs), which is a deep neural network that is particularly well-adapted to classify images, in our case to classify images of meteorites.

### Biography

Aisha Al Owais has completed her BSc in Computer Science from the College of Engineering at the American University of Sharjah. She is working as a Research Assistant in the Meteorites Center at the Sharjah Center for Astronomy and Space Sciences.

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