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COVID-19 RESEARCH NEWSLETTER

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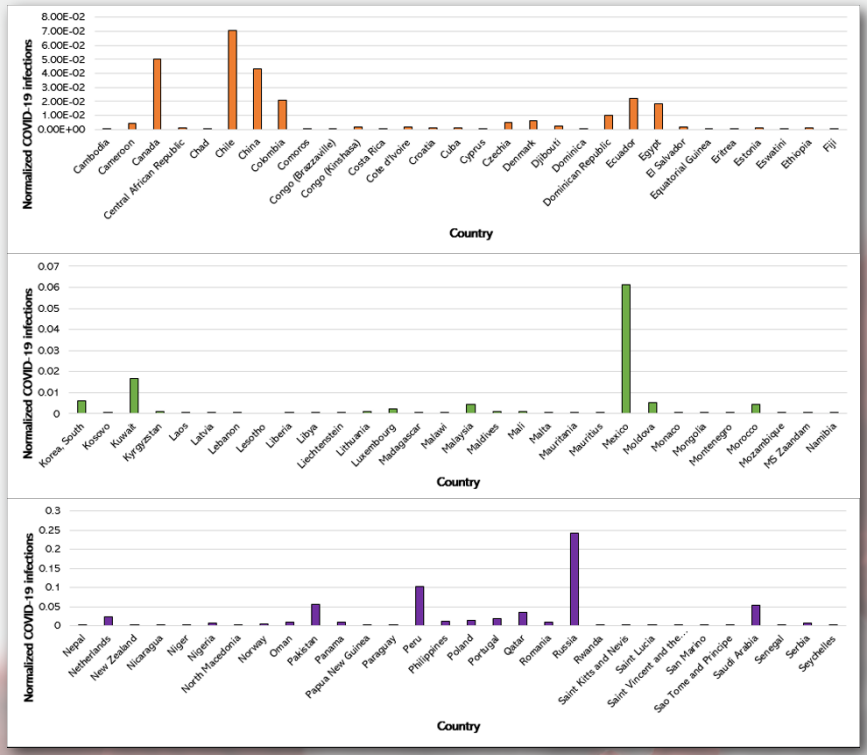
Forecasting COVID-19 Pandemic in Multiple Countries using Machine Learning



Under the leadership of Dr. Leila Ismail, the members of the INDUCE Research Lab (Intelligent Clouds & Distributed Computing Systems) are working on the development of efficient machine learning models to forecast COVID-19 infections in 187 countries across the globe. The team is conducting extensive experiments using Cloud Computing and Machine Learning techniques. In this research, a new machine-learning model was developed using the daily-based data of infections influenced by precautionary measures including confinement and sanitization. The model takes into consideration the high dynamicity of the number of infections over time of this pandemic characterized by high transmission rate. This is done by categorizing each country based on infection dynamicity trend and developing a tailored model for each category.

Currently, the developed model predicts the number of new infected cases with 90.55% accuracy. The obtained results could help healthcare organizations to better judge the effect of the undertaken precautionary measures, and support the efficient allocation of resources to face this disease.

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If you are interested in sharing your COVID-19 releated research, please send your contribution to research.office@uaeu.ac.ae

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