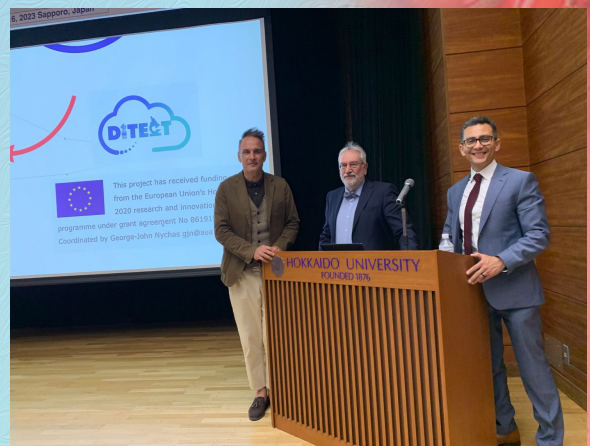
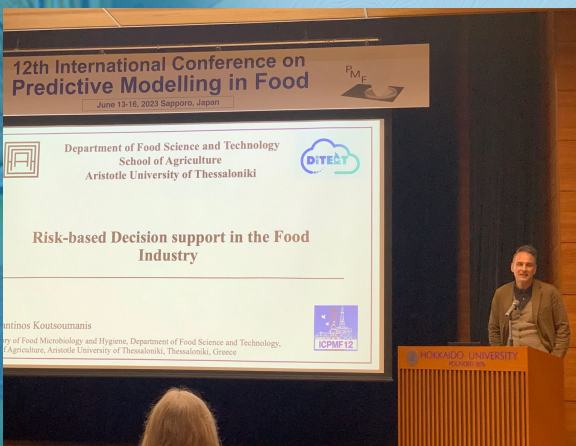
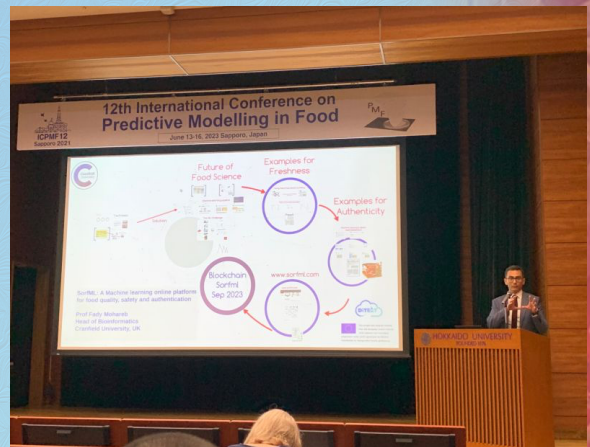




28th Newsletter

A special session for DiTECT organised by [George-John Nychas](#) with [Fady Mohareb](#) and Kostas Koutsoumanis at the 12th Int. Conference on Predictive Modelling in Food at [Hokkaido University Japan!](#) [#icpmf12](#) [#machinelearning](#) [#datascience](#) [#predictivemodeling](#),
The findings of DiTECT project were disseminated





Session Summary:

Throughout the food chain cycle, all food commodities are exposed to multiple hazards, resulting in a high likelihood of contamination. Such biological or chemical hazards may be naturally present at any stage of food production, whether accidentally introduced or fraudulently imposed, risking consumers' health and their faith in the food industry. Nowadays, a massive amount of data is generated, not only from the next generation of food safety monitoring systems and along the entire food chain (primary production included) but also from the Internet of things, media, and other devices. These data should be used for the benefit of society, and the scientific field of data science should be a vital player in helping to make this possible.

These new approaches must meet market demands food business operators (producers, retailers, resellers) and regulators needs i.e., develop and apply structured quality and safety assurance systems based on thorough risk analysis and prevention, through monitoring, recording and controlling of critical parameters covering the entire product's life cycle. However, the production, supply, and processing sectors of the food chain are fragmented and this lack of cohesion results in a failure to adopt new and innovative technologies, products and processes. The potential of using information technologies, for example, data storage, communication, cloud, in tandem with data science, for example, data mining, artificial intelligence, etc., through the whole food chain including processing within the food industry, retailers and even consumers, will provide stakeholders with novel tools regarding the implementation of a more efficient food safety management system. This symposium aims at describing the principles and applications of new approaches in contrast to current safety and quality controls in the food chain that are lacking or inadequately applied and fail to prevent microbial and chemical contamination of food products, which leads to reduced confidence among consumers.