

Data Science Week 2020

November 30th - December 4th

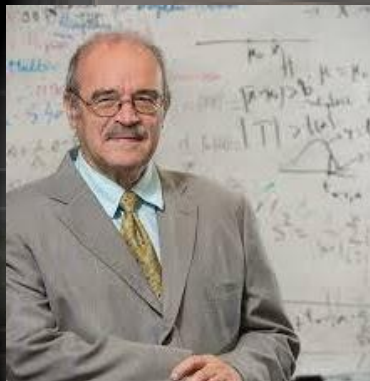
<https://sites.google.com/view/data-science-week-2020/home>

Tuesday 1st December 2020 6:00pm KT216

Prof. Victor Patrangenaru

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Vision Data Science



At each point of time, we live in a 3D space, thus natural scenes data records should be 3D, while in fact data is stored as 1D or 2D images: satellite pictures, showing that we are living in a thin layer of air, first and second generation DNA sequences, initially stored as images, and digital cameras images offer such examples of data. Emulating bilateral colored human vision, machine vision is based on 3D projective shape retrieval of scenes, from their RGB camera images. Once the 3D information is extracted, data may be represented on certain metric spaces, that often have a smooth structure, or that of a stratified space, thus opening the formidable doors to the realm of geometric and algebraic topological data analysis of 3D scenes extracted from image data. A few basic examples of 3D machine vision analysis is presented here; this is joint work with Rob Paige (MST), Daniel Osborne (FAMU), Mingfei Qiu, Ruite Guo, K. David Yao, David Lester, Yifang Deng, Seunghee Choi and Michael Crane.

Virtual Presentation: <https://purdue.webex.com/meet/aselvite>

Data Science and Machine Learning Seminar Series || Data Science and COVID-19 Thematic Program 2020-2021

<https://sites.google.com/view/data-science-epidemiology> || <https://users.pfw.edu/aselvite/DSMLS/index.html>