

## Interdisciplinary Data Sciences

\* IDSC Seminar Series \*
April 26, 2018 2:00p.m.-3:00pm
Location: CMC 120

https://idscbigdata.com/

## Presents Dr. Sritharan S. Sivaguru

**Provost & Vice Chancellor** 

Air Force Institute of Technology

Homepage: <a href="https://www.afit.edu/BIOS/bio.cfm?facID=213">https://www.afit.edu/BIOS/bio.cfm?facID=213</a>

**Title: Turbulence Estimation and Control as a Challenge in Big Data Analytics** 

**Abstract:** Prediction and control of turbulence in fluid dynamics has been the most well-known challenge for over a century. In this talk we will report on some of the progress in selecting an ergodic statistical distribution and ways to estimate and control the statistical characteristics using stochastic analysis and control theory of the equations of fluid dynamics. We will also draw mathematical connections between recent literature on utilizing machine learning to estimate turbulence to various mathematical developments related to control and stochastic analysis of the Navier-Stokes equation.



Biography: Dr. Sivaguru S. Sritharan is currently the Provost & Vice Chancellor of the Air Force Institute of Technology. His scientific expertise includes theoretical and computational aspects of incompressible and compressible fluid dynamics, stochastic analysis, optimal control theory and applied mathematics. He has given over three hundred seminars and lectures worldwide.

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