

THE CENTER FOR ADVANCED COMPUTER STUDIES

at

the University of Louisiana at Lafayette

Lafayette, Louisiana

Proudly announces a presentation

Dr. David Sathiaraj

Assistant Professor in Geography

Louisiana State University (LSU)

and

Associate Director

NOAA Southern Regional Climate Center (SRCC)

Louisiana State University (LSU)

will give a presentation entitled

**Developing Big Data Systems and Predictive Analytics' Workflows - Case Studies
in Political, Environmental and Healthcare Domains**

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Abstract

With the ubiquitous growth of data-driven domains, developing and managing Big Data Systems and Predictive Analytics' Workflows is a new necessity for both academia and industry. Spreadsheet or Tableau based data science research cannot meet the management, analytics and decision support needs of the Big Data era. Modern data science systems require dynamic data collection mechanisms, machine and deep learning capabilities that learn from historical data to predict outcomes and visual analytics' platforms that deliver accurate insights for critical decision making. In this talk, Big Data systems and predictive decision support workflows, will be described pertaining to 3 domains - political, environmental and healthcare domains. In the political domain, a predictive and visual analytics platform for a political campaign, will be described. Secondly, a climate informatics based decision support tool for predicting risk due to coastal storm surge will be outlined. Lastly, a machine learning based patented technique and a visual analytics based tool for the healthcare domain will be discussed.

DATE: FRIDAY, MARCH 9, 2018

TIME: 11:00 A.M. - 12:00 NOON

LOCATION: OLIVER, ROOM 112

Biography

David Sathiaraj has a PhD in Computer Science and Engineering. He is an Assistant Professor in Geography at Louisiana State University (LSU) and the Associate Director for the NOAA Southern Regional Climate Center (SRCC) at LSU. His research interests are in Big Data Analytics, Machine Learning, Visual Analytics, Deep Learning, Climate Informatics and Computational Geosciences. Prior to this, he was a Software Systems Engineer for SRCC developing the nationwide Applied Climate Information System (ACIS, www.rcc-acis.org), a real-time climate analytics Big Data platform. His current work is at the intersection of Computer Science, Environmental Geosciences (Climate, Water, Risk, GIS), Transportation and Healthcare.

Please post and/or circulate.

March 6, 2018