

THE CENTER FOR ADVANCED COMPUTER STUDIES

at

the University of Louisiana at Lafayette

Lafayette, Louisiana

Proudly announces a presentation

Dr. Antonio Fernandez Anta

Research Professor

IMDEA Networks

will give a presentation entitled

**Unsupervised Scalable Statistical Method for Identifying Influential
Users in Online Social Networks**

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Abstract

Billions of users interact intensively every day via Online Social Networks (OSNs) such as Facebook, Twitter, or Google+. This makes OSNs an invaluable source of information, and channel of actuation, for sectors like advertising, marketing, or politics. To get the most of OSNs, analysts need to identify influential users that can be leveraged for promoting products, distributing messages, or improving the image of companies. In this report we propose a new unsupervised method, Massive Unsupervised Outlier Detection (MUOD), based on outliers detection, for providing support in the identification of influential users. MUOD is scalable, and can hence be used in large OSNs. Moreover, it labels the outliers as of shape, magnitude, or amplitude, depending of their features. This allows classifying the outlier users in multiple different classes, which are likely to include different types of influential users. Applying MUOD to a subset of roughly 400 million Google+ users, it has allowed identifying and discriminating automatically sets of outlier users, which present features associated to different definitions of influential users, like capacity to attract engagement, capacity to attract a large number of followers, or high infection capacity.

DATE: FRIDAY, OCTOBER 12, 2018

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

LOCATION: OLIVER, ROOM 112

Biography

Dr. Antonio Fernandez Anta is a Research Professor at IMDEA Networks. Previously, he was a Full Professor at the Universidad Rey Juan Carlos (URJC) and was on the Faculty of the Universidad Politecnica de Madrid (UPM), where he received an award for his research productivity. He was a postdoc at MIT from 1995 to 1997, and spent sabbatical years at Bell Labs Murray Hill and MIT Media Lab. He has more than 25 years of research experience, and more than 200 scientific publications. He was the Chair of the Steering Committee of DISC and has served in the TPC of numerous conferences and workshops. He received his M.Sc. and Ph.D. from the University of SW Louisiana (now University of Louisiana at Lafayette) in 1992 and 1994, respectively. He completed his undergraduate studies at the UPM, having received awards at the university and national level for his academic performance. He is a Senior Member of ACM and IEEE.

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