Summary Report – IEEE CIS Distinguished Lecturer Program

Prof. Sushmita Mitra
IEEE Computational Intelligence Society Distinguished Speaker
June 26, 2019
Arequipa, Peru

Organizing Committee
Dr. Yván J. Túpac, Universidad Católica San Pablo, chair of IEEE-CIS Peru Chapter.

Figure 1. Professor Sushmita Mitra during a speaking at June 24 Lima (left), and June 26 Arequipa (right).

This document presents a summary report of the visit of Professor Sushmita Mitra to Peru by the Distinguished Speakers Program of IEEE Computational Intelligence Society. This visit was request by the IEEE CIS Peru Chapter, and programmed to be held in June 24-26 covering two talks, the first in June 24 (Lima) and the second in June 26 (Arequipa) as detailed in following:

Lima, June 24 2019

On June 24 (Lima Peru) at 3pm hours were programmed two talks, the first talk "*From Learning to Deep Learning*" which abstract is:
"In this talk we provide a walk through the development of machine learning, encompassing simple supervised and unsupervised learning, followed by neural learning. Finally this culminates in the development and promise of deep learning and transfer learning. Illustrative examples serve to explain"

In this talk the audience was composed of faculty and students coming from Computer Science and Engineering programs.

The second talk "" was programmed the same day June 24 at 6pm, and the abstract ws:
"Incorporation of domain knowledge is found to facilitate the mining of high-dimensional microarray gene expression data, particularly towards their clustering followed by selection of genes. In this talk we focus on the use of taxonomic knowledge, in terms of gene ontology, for improved grouping and selection of significant genes. The concepts of fold change and medoids help in determining the representatives of biologically relevant fuzzy clusters of genes. Next we discuss the quantitative evaluation of gene subsets using domain knowledge. This is followed by

the extraction of regulatory gene interaction sub-networks using correlation, least-squares fitting, and radial basis functions. Experimental results are provided on publicly available gene expression data"

In this talk, the audience was composed by student from Bioengineering program.

Arequipa, June 26 2019

In Arequipa was programmed one talk: "*From Learning to Deep Learning*" to be realized in Main Auditorium of the Universidad Católica San Pablo at 15.30h, and which abstract is:
"In this talk we provide a walk through the development of machine learning, encompassing simple supervised and unsupervised learning, followed by neural learning. Finally this culminates in the development and promise of deep learning and transfer learning. Illustrative examples serve to explain"

In this talk, the audience was composed of faculty and students from the host university (Universidad Católica San Pablo - UCSP), and other universities of Arequipa Area: (*Universidad Nacional San Agustín, Universidad Católica Santa María, Universidad La Salle* and others), and the participation of IEEE members and students from local IEEE students branches, totalizing about 80 assistants.

About the publicity, this IEEE DLP talk was publicized through emailing from UCSP, SPC (*Sociedad Peruana de Computación*), Facebook event from SPC. The IEEE COMSoc also provided support by sharing SPC's Facebook event.

Figure 2 Facebook SPC event and IEEE COMSoc sharing for talk in Arequipa

Figure 3. Pictures of Professor Sushmita Mitra during her talk in Arequipa