Improving Recognition Accuracy: Application in Biometrics

ABSTRACT

Achieving accurate recognition has the potential to benefit numerous applications. In the first part of the talk, I will present examples of such applications and discuss basic concepts regarding biometric systems. Without loss of generality, I will then focus on Face Recognition as an exemplar application to highlight the various steps involved in achieving robust and accurate recognition, and present our contributions on Semi-Supervised Learning and Score Normalization. Semi-Supervised Learning methods utilize unlabeled samples to construct better models, while Score Normalization techniques make score distributions homogeneous so that a universal threshold can be found to classify unseen samples. At the second part, I will share my experiences as a graduate student in USA, have an open-ended discussion concerning graduate studies, and I will answer questions related to who should pursue a Ph.D. degree and what is the application process for getting admitted to a U.S. university. Finally, I will present current research openings at the Computational Biomedicine Lab and the University of Houston.

Bio: Panagiotis Moutafis is a third year Ph.D. student at the Department of Computer Science of the University of Houston. He joined the Computational Biomedicine Lab in 2011 and since then he has been working as a member of the biometrics group on Machine Learning applications. Panagiotis earned his B.Sc. in Statistics at the Athens University of Economics and Business in 2011. He is a 2014 recipient of the Hellenic Professional Society of Texas Scholarship Award.