Faculty Name: Sri Krishnan

Project Title: Audio Signal Analytics

Description of Project (Provide ½ page project description)

Audio plays a vital role in many vertical applications covering the areas of information and communication technology (ICT) and wireless multimedia services. This project involves audio database management for cloud and mobile-based applications, pre-processing and filtering, and content analysis using algorithms developed in the Signal Analysis Research (SAR) group at Ryerson University. The audio databases covered include bio-acoustic signals, music and speech, and environmental sounds. The algorithms are based on time-domain, frequency-domain and machine learning principles.

Responsibility of Student (Specify the duties and responsibilities of the student)

Student will be responsible for database management, creating additional algorithms in C, Python, Matlab. The student will also contribute to technical writing and make oral presentations in the SAR seminar series. The student will get ample opportunity to work with post-doctoral fellows, graduate students, research assistants and visiting students.

Specify Requirements (Please state any specific requirement of this position)

Sound knowledge in signals and systems (ELE/BME 532 and/or ELE/BME 632), and programming.