CLS Seminar Series

Knowledge Extraction from Medical Literature for Cardiac Imaging Decision Support

Dr. Ernest V. Garcia and Dr. Eugene Agichtein

Abstract: Todays healthcare system requires clinicians to master an ever-expanding knowledge base while the time to master this knowledge and apply it to specific tasks is steadily shrinking. The convergence of an expanding knowledge base, expanding patient databases and escalating time constraints poses a serious healthcare problem that inevitably leads to physicians errors. Solution to this problem requires the development of new tools to assist physicians to timely apply comprehensive, up-to-date knowledge and the available patient data to specific clinical problems. The long-term objective of our project is to improve the care of cardiac patients by developing an imaging expert system that is automatically updated with the latest scientific/clinical knowledge extracted from journal articles using natural language understanding techniques. The goal of this constantly updated decision support system is to assist physicians to appropriately perform and interpret ECG-gated myocardial perfusion SPECT studies for the diagnosis and prognosis of coronary artery disease.

Wednesday, March 19, 2008, 3:00 pm
Mathematics and Science Center: W201

Refreshments will be provided.

Mathematics and Computer Science
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