Knowledge, Information and Data (KID) Track

Track Description:

This track focuses on the broad field that includes data, information, and knowledge. Sub-areas include: artificial intelligence, classification, clustering, database management, data mining, digital libraries, electronic publishing, expert systems, hypermedia, hypertext, information processing, information retrieval, knowledge management, machine learning, multimedia systems, search, semantic web, string processing, text mining and processing, XML, WWW, Web 2.0. Related areas include bioinformatics, library and information science, and multimedia development.

Why take this Track?

This track connects with the very broad field of information processing or information technology. Many activities involve work with search engines or Web services or database management systems. Since these capabilities are a key part of myriad activities, those trained in this field can work in most any application domain or in any corporation or institution.

Associated Faculty:

Dr. Ing-Ray Chen Dr. Ed Fox

Dr. T.M. Murali Dr. Naren Ramakrishnan

Junior Year			
CS 3114 Data Structures and Algorithms	(3)	CS 3304 Comparative Languages	(3)
CS 2506 Intro to Computer Organization II	(3)	CS 3214 Computer Systems	(3)
CS 3414 Numerical Methods	(3)	CS 3604 Professionalism in Computing	(3)
Comm 2004 Public Speaking	(3)	Stat 4705 Statistics for Engineers or	(3)
Math 3134 Applied Combinatorics	(3)	Stat 4714 Probability & Statistics for EE	
		CS 4634 Design of Information	(3)
Total	15	Total	15
Senior Year			
CS 41X4 Theory Course	(3)	CS 4944 Senior Seminar	(1)
CS 4604 Intro Database Mgt Systems	(3)	CS 4244 Internet Software Development	(3)
CS 4804 Introduction to AI	(3)	CS 4XXX Data Mining	(3)
Engl 3764 Technical Writing	(3)	CLE Elective	(3)
CLE Elective	(3)	CS 4624 Multimedia/Hypertext	(3)
Total	15	Total	13

The following electives are recommended (but not required) for this track:

- 1. Area 2:
 - o Phil 1204, Knowledge and Reality
 - o Phil 1304, Morality and Justice
- 2. Area 3:
 - o Comm 1014, Introduction to Communication Studies
- 3. Area 7:
 - o Phil 2304, Global Ethics (also in area 2)
- 4. Minoring in Philosophy, or taking free electives in that department, might be appealing. If so, assuming prerequisites are satisfied, the following might be useful:
 - o Phil 1504, Language and Logic
 - o Phil 3505-6, Modern Logic and Its Development
 - o Phil 4204, Philosophy of Mind (3 hours of philosophy required as prerequisite)
 - o Phil 4224, Epistemology (3 hours of philosophy required as prerequisite)
- 5. Taking free electives in Psychology might be appealing. If so, assuming prerequisites are satisfied, the following might be useful:
 - o Psyc 2044: Psychology of Learning (Pre: Psyc 2004)
 - o Psyc 2064: Nervous Systems and Behavior (Pre: Psyc 2004)