2010/2011 Seminar Series

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Process Mining: Improving BPM by Automatically Discovering Workflows

By:

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This talk will introduce the concept of process mining as a technique for automatically mining log data for patterns that demonstrate common workflows through a business process. Process mining is a vital component of the business process management lifecycle, as it allows one to gain an accurate understanding of how a process is actually being executed, as opposed to how it should be executed. Thus it can be used to determine whether established procedures are being followed, as well as to gain insight on how those procedures might be improved. A number of challenges will be addressed, such as balancing the tradeoff between readability and accuracy, choosing generality over specificity and dealing with issues such as noise, tasks missing from the logs, and loops. A few existing process mining algorithms will also be demonstrated and their respective properties discussed.

Scott Buffett is a Research Officer in the Internet Logic group at the National Research Council of Canada's Institute for Information Technology. He holds a PhD in Computer Science from the University of New Brunswick, where he continues to serve as an Adjunct Professor. His work specializes in the application of intelligent agents and artificial intelligence toward the automation of business processes and electronic commerce. His research interests lie in the areas of automated negotiation, preference elicitation, workflow analysis, decision analysis and multi-agent systems.

Wednesday, January 12th @ 3:30pm
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