Process Mining and RFID

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Abstract

A well-defined business process which reflects the dependencies among tasks is desirable for modern business intelligent. Processes are typically modeled as annotated activity graphs. The traditional method is using the workflow paradigm to prescribe how business processes should be performed. Process mining (or Workflows mining), on the other hand, is to construct process models from event logs of past (the data). This technique aims at improving the underlying processes by providing techniques and tools for discovering process, control, data, organizational, and social structures from event logs. The discovered information can be used to develop new systems that support the execution of business processes or as a feedback tool that helps in analyzing and improving the performed business processes. Process mining raises a number of interesting scientific questions coming to several kinds of the challenges of process mining.

This talks will first introduce the general idea and the objectives of our study. The existing algorithms for process mining will be discussed and compared. A new algorithm which is especially good for the case when the event logs (data) contain errors is proposed. Followed an overview of recent development on RFID (Radio Frequency IDentification), a process mining application on RFID will be discussed.