

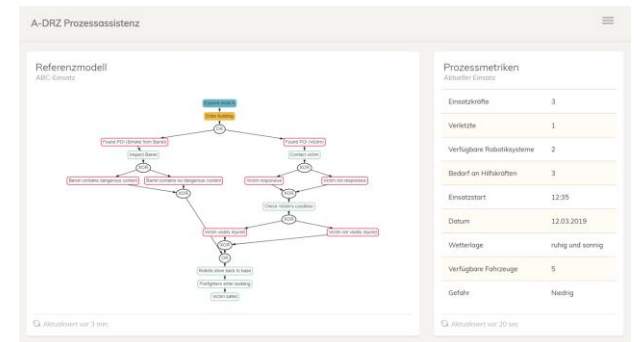
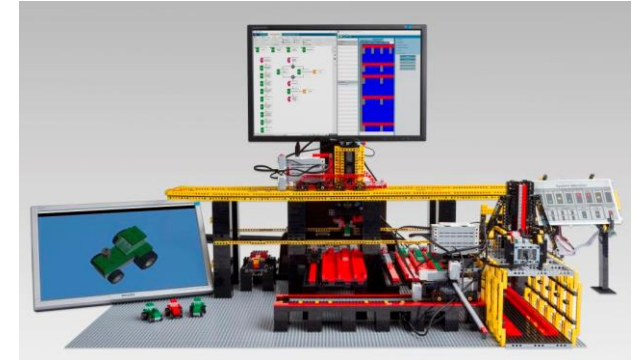
Junior Professorship for Management Analytics

Presentation for WIM Students Fall Term 2020



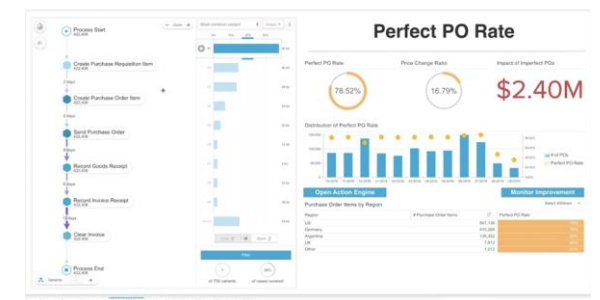
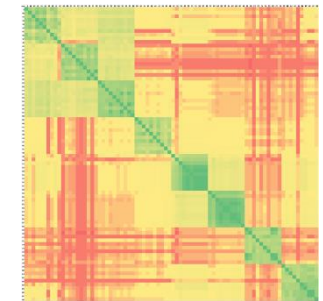
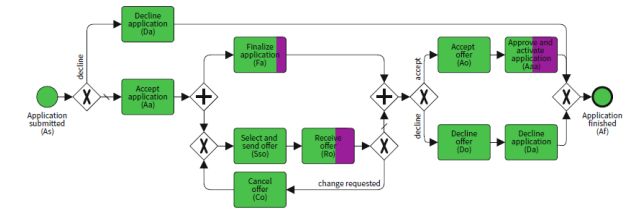
About the Junior Professorship

- Prof. Dr. Jana-Rebecca Rehse
 - Junior Professor at University of Mannheim since March 2020
 - Former Researcher at German Research Center for Artificial Intelligence
- Research Area: Applications of Data Analytics and Artificial Intelligence in Business Process Management
- Concrete Research Fields:
 - Domain-specific Applications of Process Mining
 - Data-driven Process Assistance Systems
 - Machine Learning for Process Prediction
 - Process Analytics for Process Automation



IS 514: Process Mining & Analytics

- Contents: Concepts and methods for process analytics and process mining, including process model analysis, process discovery, conformance checking, process enhancement, process similarity, process matchings, and machine learning applications
- Live Lectures: Thursdays, 15:30 – 17:00
 - Lecturers: Prof. Jana Rehse, Prof. Han van der Aa
- Exercise Sessions: Mondays, 10:15 – 11:45 or 15:30 – 17:00
 - Instructors: Adrian Rebmann, Alexander Kraus
 - Sessions are set up as walk-in office hours to discuss the weekly exercise sheets
- (Mandatory) Case Study:
 - Opportunity to gain hands-on process mining experience in a team
 - Details will be announced during Week 3



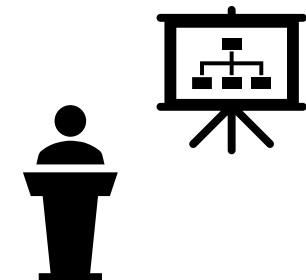
IS 602: Business Intelligence & Business Analytics Systems

- Contents: Theoretical foundations, concepts, tools, and current practice of Business Intelligence and Management Support Systems, to show how automated decision support can be helpful for organizations
- Lectures: Thursdays, 10:15 – 11:45
 - Regular lectures will be uploaded as videos to ILIAS
 - Guest lectures take place as live events
- Exercise Sessions: Thursdays, 15:30 – 17:00
 - Instructor: Fared Zandkarimi
 - Sessions will be held live via Zoom
- (Mandatory) Case Study:
 - Opportunity to gain hands-on experience in BI&A
 - Details will be announced on October 15th



IS 752: Master Seminar on Management Analytics

- Goal: Prepare you for starting your master thesis
 - Apply basic research methods from the IS discipline
 - Independently and systematically explore a research topic
 - Structure and write an academic paper
 - Present your results in front of an audience
- Organization:
 - Takes place every semester
 - Application deadline is a week before the semester starts
- Current (Exemplary) Topics
 - Use Cases for Machine Learning in Process Mining
 - Current Approaches for Next-event Prediction
 - Approaches to Process Standardization



Master Theses

- Prerequisites:
 - Relevant Seminar (IS 752 is recommended)
 - Some experience in process mining & analytics
- Choice of Topic
 - Topics must be of interest for you and for me
 - If you're interested in writing a master thesis, you should propose your own topic
 - If I have topics available, I'll post them on my website
 - Cooperations with Industry are possible and encouraged
- Current (Exemplary) Topics
 - Influence of Process Log Characteristics on Prediction Algorithms
 - Identifying Standard Processes from Celonis Data (Industry Cooperation)
 - Analyzing and Optimizing Purchasing Processes (Industry Cooperation)

