Intelligent Workflows in Healthcare

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Room Sj 1-149, Samuel C. Johnson Research Bldg.
Mayo Clinic Scottsdale

Speaker’s Bio:
Areti is a Senior Researcher in the School of Informatics, The University of Edinburgh. She has a BSc in Management Science and Technology from the Athens University of Economics and Business, as well as an MSc and PhD in Artificial Intelligence from the University of Edinburgh. Her research expertise lies in the areas of artificial intelligence, health informatics and workflow management. She develops intelligent methods to model, simulate, verify and analyze complex workflows, including clinical workflows. She has been involved in a number of collaborative projects with the NHS and she is currently part of the SOCIAM project, which studies the theory and practice of social machines. She also works closely with the Usher Institute of Population Health Sciences and Informatics, in the University of Edinburgh, where she leads a wide range of educational projects in medical informatics.

Talk Abstract:

Effective and efficient provision of patient-centered care is a big challenge. Care pathways are complex, involving safety-critical tasks and requiring the coordination of multi-disciplinary teams. Unfortunately, it is often not clear what tasks should be included in a patient care pathway and in what order, while errors, delays and miscommunication are not uncommon either. In this talk, I will present recent work in the University of Edinburgh, where we employ artificial intelligence methods and workflow technologies to model, verify, analyze and support integrated care pathways.

I will also describe an ongoing collaboration with BMI, which forms part of the ROOT project. In this, we employ process mining and observational techniques to study electronic health record-mediated workflow at the Pre-Operative setting of one of the Mayo Clinic facilities. We aim to compare results between different facilities, so as to inform workflow standardization and process improvement across the Mayo Clinic enterprise.

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