

Clinical decision support

An introduction to clinical decision support



Drs. Dr. Jeroen de Bruin
Senior Lecturer, Institut eHealth

Predavanje #1: Review of Decision support and propositional logic

Termin: Ponedjeljak 8.6., 10:00 – 12:00

Clinical decision support

Mathematical constructs of CDSS: Set theory and propositional logic



Drs. Dr. Jeroen de Bruin
Senior Lecturer, Institut eHealth, FH JOANNEUM, Graz

Predavanje #2: Implementation of clinical decision support in DROOLS

Termin: Utorak 9.6., 9:00 – 11:00

Lokacija: Virtualna soba na adresi <https://bbb.riteh.hr/b/iva-9xr-kuc> (nikakva prethodna registracija nije potrebna; molim da po ulazu u sobu stišate mikrofon)

Predavač: Dr. Jeroen de Bruin, FH Joanneum, Graz, Austrija

Sažetak predavanja:

In an age where machine learning and data-driven science are the new paradigms for artificial intelligence, another kind of AI is still very much active in the background: knowledge-based decision support systems. In these systems, proven knowledge and business logic are digitally implemented in order to automate processes at incredible speeds. In this primer, I will discuss the cornerstones of decision support in medicine, including logic, rules, inference, and success factors. Furthermore, I present examples of knowledge-based clinical decision support systems, and give a quick tutorial on how to implement such as system yourself using Drools Business Rule Management System.

Name	
DE BRUIN, Jeroen	
Affiliation	
FH JOANNEUM	
Role within your organization	
Senior Lecturer	
Email Address	
Jsdebruin1981@gmail.com	
Background and experience	
<p>Drs. Dr. Jeroen S. de Bruin is senior lecturer in artificial intelligence in medicine, clinical decision support, and interoperability standards. He studied informatics at Leiden University, the Netherlands, and did a PhD there in Bioinformatics. After a PostDoc at Leiden University Medical Center in informatics for mass spectrometry, he moved to Austria to start a post-doc at the Medical University of Vienna, where he designed, developed, and integrated clinical decision support systems in intensive care medicine. He was also Senior Product & Quality Manager for clinical software at Medexter Healthcare GmbH, where he also designed clinical decision support systems. He has a background in medical statistics and data science, and is a specialist in the use of machine learning and symbolic artificial intelligence in clinical applications, as well as interoperability and knowledge engineering, including the design and implementation of data interoperability profiles in HL7 v2.x, CDA, and FHIR. He is also a member of the HL7 Working Group for Arden Syntax.</p>	