Abstract. For the main part, electronic government (or e-government for short) aims to put digital public services at disposal for citizens, companies, and organizations. To that end, in particular, e-government comprises the application of Information and Communications Technology (ICT) to support government operations and provide better governmental services (Fraga, 2002) as possible with traditional means. Accordingly, e-government services go further as traditional governmental services and aim to fundamentally alter the processes in which public services are generated and delivered, after this manner transforming the entire spectrum of relationships of public bodies with its citizens, businesses and other government agencies (Leitner, 2003). To implement this transformation, one of the most important points is to inform the citizen, business, and/or other government agencies faithfully and in an accessible way. This allows all the partaking participants of governmental affairs for a transition from passive information access to active participation (Palvia and Sharma, 2007). In addition, by a corresponding handling of the participants’ data, a personalization towards these participants may even be accomplished. For instance, by creating significant user profiles as a kind of participants’ tailored knowledge structures, a better-quality governmental service may be provided (i.e., expressed by individualized governmental services). To create such knowledge structures, thus known information (e.g., a social security number) can be enriched by vague information that may be accurate to a certain degree only. Hence, fuzzy knowledge structures can be generated, which help improve governmental-participants relationship. The Web KnowARR framework (Portmann and Thiessen, 2013; Portmann and Pedrycz, 2014; Portmann and Kaltenrieder, 2014), which I introduce in my presentation, allows just all these participants to be automatically informed about changes of Web content regarding a respective governmental action. The name Web KnowARR thereby stands for a self-acting entity (i.e. instantiated form the conceptual framework) that knows or apprehends the Web. In this talk, the frameworks respective three main components from artificial intelligence research (i.e. knowledge aggregation, representation, and reasoning), as well as its specific use in electronic government will be briefly introduced and discussed.

Biography

Edy Portmann is Assistant Professor of Information Science at the University of Bern in Switzerland, where he carries on research in the intersection of semantic search, social web, and soft computing. He is a nominee for Marquis Who’s Who, co-founder of the Mediamatics research think tank, and co-editor of ‘Fuzzy Management Methods,’ as well as author of two practical research books in his fields. In the past, Edy studied economics, business, information systems, and computer sciences at various Swiss universities. During his studies, Edy worked in several organizations in study-related disciplines.
References