Abstract: E-learning represents a unique opportunity to learn independently, regardless of time and place, to acquire knowledge without interruption, customized to the individual, and based on the principles of traditional education. One of the most important segments in today’s development and use of e-learning systems is personalization of content and building user profiles based on learning behaviors. Personalization increases e-learning efficiency and acceptance, as it allows learners to set their own goals, learn at their own pace, and even decide their own method of learning. In order to personalize the learning process and adapt content to each learner, e-learning systems can use different strategies. The seminar will present an overview of intelligent techniques based on the modern perspectives of research and innovation for personalization of e-learning systems. Special emphasis will be given to intelligent tutoring systems, which support and improve learning and teaching of domain-specific knowledge. The Protus programming tutoring system, developed at the University of Novi Sad and designed to provide learners with personalized courses from various domains, will serve as a practical example of implementation.

Bio: Aleksandra Klašnja-Milićević is an assistant professor at the Faculty of Sciences, University of Novi Sad, Serbia. She joined the graduate program in Computer Sciences at Faculty of Sciences, Department of Mathematics and Informatics, University of Novi Sad, in 2003, where she received her M.Sc. degree (2007) and PhD degree (2013). Her research interests include e-learning and personalization, Intelligent Tutoring Systems, information retrieval, Internet technologies and recommender systems. She actively participates in several international projects. She has also served as Program Committee member of several international conferences. She co-authored one university textbook and one monograph. She has published over 30 scientific papers in proceedings of international conferences and journals (akm@dmi.uns.ac.rs).