



Research seminar in Computer Science

Collaborative immersive analytics: Building a virtual reality platform to support asymmetric data exploration

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Time Wednesday, 18 September 2019, 4-5 pm

Place D1136v, building D, Växjö

Details vr.ar.lnu.se/seminar

Abstract Our current research explores user interaction design in immersive VR environments, specifically within the context of Immersive Analytics, and corpus linguistics. We are investigating (a) interaction design approaches to navigate time-oriented data using 3D user interfaces, and (b) collaborative aspects of interacting in the VR environment in an asymmetrical scenario (one immersed in VR, while another operates a non-immersive application for the purpose of synchronous collaboration for data analysis). An immersive data exploration system in VR has been developed, and multiple iterations have been empirically investigated in various experiments and software demos. The first three iterations of that system will be presented in this progression seminar. Related research in the areas of VR, 3D User Interfaces, Immersive Analytics, and Computer-Supported Cooperative Work informed the methodological and evaluative aspects. We aim to contribute in advancing analytical workflows that (1) facilitate engagement and motivation during the data analysis activity, (2) integrate in existing data analysis practices, and (3) encourage collaboration and co-located meaning- and decision-making using a combination of immersive and non-immersive tools.