

## **Development of 3D interactive systems**

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Abstract: Three-dimensional interactive systems have a wide range of applications in multiple domains. In this talk we will present an overview of several such systems that have been developed in the last few years in the Graphics and Hypermedia Lab of UCY. The most challenging, in many respects, is the latest prototype training simulator being developed jointly with the Cypriot Police. Taking that as a reference we will present various issues that we are currently investigating in our effort to make the simulator a more effective training tool for the purpose. Things like: (a) Real-time realistic rendering for dynamic scenes, (b) Realistic character animation and simulation – does this extra bit of realism help the trainees? (c) Affective input – can we, by reading the user's affective state, improve the interaction between the virtual characters and the user? Much of the above are still work in progress. In this talk we will present some of the issues, and some preliminary results.