



Invitation to Seminar Talk

Computer Drawing Tools for Assisting Learners, Hobbyists, and Professionals

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Host: Bernd Bickel

Drawing is the earliest form of visual depiction. Employing graphics, image processing and interaction techniques, this talk is a walk through new ways to facilitate and accelerate drawing. As this is a broad spectrum to tackle, we'll focus on three specific problems related to drawing and show how computer tools can help users to overcome the main challenges on each domain. First, we'll explore an interactive drawing tool to help people practice traditional drawing-by-observation techniques. This tool was built supported by a number of techniques to help people gain consciousness of the shapes in a scene and it automatically extracts visual guides from a model photograph. The tool's interface displays these information and offer corrective feedback to guide its manual reproduction. Second, we'll examine a method to help designers to enrich their drawings with color and shading. Professionals frequently draw curvature lines to convey bending of smooth surfaces in concept sketches. We exploit this information and extrapolate curvature lines in a rough concept sketch. This extrapolation allows us to recover the intended 3D curvature field and surface normal at each pixel, to create shading and texturing on top of the sketch. Finally, we'll introduce a tool that helps users to fabricate wire wrapped jewelry. Analogous to physical 3D drawing, this form of handmade jewelry can be seen as taking sketches into the physical world. The presented method assist the user in the main challenges of creating 2D wire-wrapped jewelry from a 2D drawing: decomposing the input into a set of wires, and bending the wires to give them shape.

Monday, August 22, 2016, 4:00pm

Seminar Room, Central Building, 3rd floor



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage (note that the IST Shuttle times are highlighted in dark green):

http://ist.ac.at/fileadmin/user_upload/pdfs/IST_shuttle_bus.pdf

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