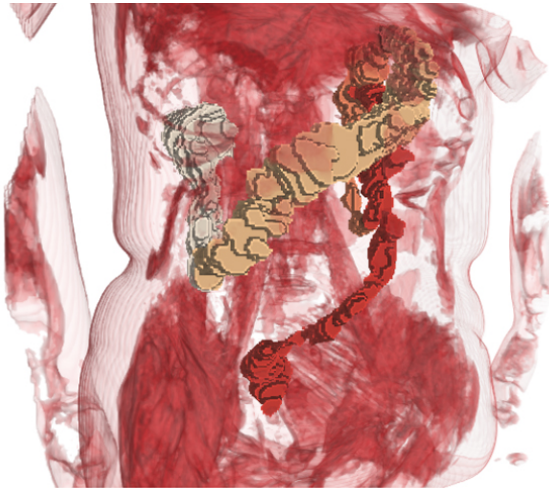


A Web-based Application for the Visual Exploration of Colon Morphology Data

Males, Jan; Monclus, Eva; Diaz, Jose; Vazquez, Pere-Pau



The colon is an organ whose constant motility poses difficulties to its analysis. Although morphological data can be successfully extracted from Computational Tomography, its radiative nature makes it only indicated for patients with disorders. Only recently, acquisition techniques that rely on the use of Magnetic Resonance Imaging have matured enough to enable the generation of morphological colon data of healthy patients without preparation (i. e. administration of drugs or contrast agents). As a result, a database of colon morphological data for patients under different diets, has been created. Currently, the digestologists

we collaborate with analyze the measured data of the gut by inspecting a set of spreadsheets. In this paper, we propose a system for the exploratory visual analysis of the whole database of morphological data at once. It provides features for the visual comparison of data correlations, the inspection of the morphological measures, as well 3D rendering of the colon segmented models. The system solely relies on the use of web technologies, which makes it portable even to mobile devices.