

Bayrak, C., Çelik, İ., Varol, A., Şeker, R., Şakarcan, A., Abdallah, M., Bissada, N., Finkbeiner, A.: “Modeling and Simulation of Urodynamics”, TASSA Annual Conference, Proceedings CDs, Drexel University, Philadelphia, PA, 25-26 March 2006,

2.12. MODELING AND SIMULATION OF URODYNAMICS,

Coşkun Bayrak, İsmail Çelik, Asaf Varol, Remzi eker, Abdullah akarcan, Mohammed Abdallah, Nabil Bissada, and Alex Computer Science Department, University of Finkbeiner, Arkansas at Little Rock, Little Rock, AR 72204, Mechanical and Aerospace Engineering Department, West Virginia University, Morgantown WV 26506, Computer Education Department, Technical Education Faculty, Frat Universitesi, Elazig, Türkiye, Department of Pediatrics, University of South Carolina Medical School, Columbia, SC, Department of Urology, University of Arkansas Medical Sciences, Little Rock, AR, 72205.

The role of modern medical imaging is not limited to simple visualization and inspection of anatomic structures, but goes beyond that to patient diagnosis, advanced surgical planning and simulation, and radiotherapy modeling. In addition, segmenting and rendering methods currently plays an effective role in medical imaging. These methods help to provide more accurate models and simulations especially from digital and medical images.

Therefore, the focus of this research investigation is to build and simulate realistic 3D environments of urodynamics to understand the holding or storage of urine in the bladder, the way the bladder empties, and the rate of movement of urine out of the bladder during urination. More specifically we are interested in studying stress incontinence related problems and provide diagnostic tools to detect and suggest remedies to such problems.

Bayrak, C., Çelik, İ., Varol, A., Şeker, R., Şakarcan, A., Abdallah, M., Bissada, N., Finkbeiner, A.: “Modeling and Simulation of Urodynamics”, TASSA Annual Conference, Proceedings CDs, Drexel University, Philadelphia, PA, 25-26 March 2006,
