Tampere University of Technology Department of Signal Processing Examiner: Dr. Stanislav Stanković

FINAL EXAMINATION January 30th 2012

Students may use their own calculators Students may keep the question paper

Write clearly on each paper: -SGN-5406 Virtual Reality

- -Date
- -Name
- -Student Number

1.	Name three areas of application of VR systems.	(10 pt)
2.	Explain three ways by which humans detect the direction of the sound.	(10 pt)
3.	Name the two types of haptic displays.	(10 pt)
4.	What is a polygonal mesh in 3D computer graphics.	(10 pt)
5.	Give example for different formats for storing 3D (image or video) content.	(10 pt)
6.	List different types of immersive and non-immersive displays. Explain (2-3 sentences) the basic principle of operation of each one, and give examples of potential applications for each type.	(10 pt)
7.	What is tracker accuracy?	(10 pt)
8.	What are the drawbacks (i.e. disadvantages or problems) of using electromechanical trackers?	(10 pt)
9.	Explain good and bad sides of server architecture in networked virtual environments.	(10 pt)
10.	Explain the difference between augmented reality and virtual reality.	(10 pt)