Virtual Reality Technology - An Introduction

This tutorial is intended for those new to the field of virtual reality (VR) or virtual environments (VE). The tutorial is based on the book recently published by the presenter (www.vrtechnology.org).

Topics to be addressed
- Input devices (trackers, navigation, and gesture interfaces)
- Output Devices (graphics, three-dimensional sound, and haptic displays)
- Computing architectures for VR (graphics and haptics pipelines, PC and workstation-based architectures, parallel and distributed systems)
- Modeling (geometric, kinematics, physical, behavior, model management)
- VR Programming (scene graph, WTK, Java 3D, GHOST, PeopleShop)
- Human factors in VR (user performance evaluations, multimodal evaluations, cybersickness)
- VR applications (medical, education/entertainment, military, manufacturing, robotics, visualization)