

**ECE Department
MS EE Scholarly Paper Presentation
1:00 PM, Thursday, April 24, 2008; Room 230 STII**

CISCO Routers: Architecture, Configuration and Security

**By
Sanjay Rathi**

Advisor: Dr. Bijan Jabbari

Abstract

Currently, Internet is the single largest hub for people searching for data related to numerous topics every second all around the world. A large amount of data is transferred between computers in the entire world every second. We can find a large amount of information on almost all topics we need instantly within few moments. Routers are the backbone of such an internetworking system which handles the flow of such a huge amount of data.

Although there are differences between the routers, they have largely the same features. Routers operate on the Network layer, which is at a higher level in the OSI conceptual model. Like switches, routers use a combination of software and hardware, but it is used to route data from its source to its destination. Routers actually have a sophisticated Operating System that allows them to configure various connection ports. This paper outlines the underlying architecture, configuration parameters and the security of Cisco routers.