

## Apply It.

### The Math behind

### SPEEDING UP THE INTERNET...

#### Math that's used to accelerate the internet:

Mathematical models, algorithms, large-scale computation, data mining.

#### Uses and Applications:

Alleviating internet congestion, speeding up content delivery, producing effective search results

#### How it works:

Mathematicians and computer scientists model the internet traffic flow and examine the type of content being exchanged (graphics, photos, etc.) The algorithms they design route the traffic so that data rich content is pushed to a network of servers located around the Internet, thus reducing the load on a Web site's central computers. This process is called network caching. This sophisticated routing results in a decrease in data congestion, minimizing the chance that the network will slow down.

#### Interesting Fact:

Of the approximately 6 billion people on the planet, 945 million have access to the internet. (Computer Industry Almanac, 2003). More than 185 million of those users are in the US and Canada.

