CS4254: Network Architecture and Programming

Srinidhi Varadarajan
Fall 2004

Class Details
- Instructor:
  - Dr. Srinidhi Varadarajan
  - Office Hours: 10 am – 11:00 am Mon-Wed
- GTAs:
  - John Gordon (jogordo3@vt.edu)
  - Varun Pandey (vpandey@vt.edu)
  - Office Hours Location: McB 118
  - Office Hours: M - F 6-7 pm
- Class:
  - Meeting: 12:30 pm – 1:45 pm, Tu-Th, Hutcheson 409
- Electronic Discussion:
  - forum.cs.vt.edu
  - Register at this site and use the CS4254 section for public postings.
  - Class listserv will be used for announcements. You will be automatically added to the listserv.

Goals
- Explain basics of computer communication over various physical media
- Introduce concepts of network protocols and identify key issues
- Explain the seven-layer OSI communication protocol model
- Explain the architecture and protocols comprising the Internet
- Implement network services that communicate through the Internet
- Identify and explore network programming abstractions in use today

Topics
- Introduction to computer network architectures
- OSI Protocol Model
- Internet Protocols
- Network Programming Abstractions
- Client/Server Programming
- Network Security

Prerequisites
- CS3204 (Operating Systems)
- Strong programming ability in C
- User-level understanding of the UNIX operating system
- Ability to undertake substantial independent design projects

Resources
- Required text:
- Recommended text:
## Grading

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<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Homework + Quizzes</td>
<td>10%</td>
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<tr>
<td>Projects (3)</td>
<td>45%</td>
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<td>Midterm (1)</td>
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<td>Final Project</td>
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