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Visualization Tools in the Classroom and on the Web

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1. Introduction

I use a variety of packages in the classroom and on the web. My basic philosophy can be summarized simply:

- Technology is a means and not an end
- Technology can be used in a class without necessarily using it in the classroom
- Use free software if it is available. Free doesn't mean inferior – selling documentation is another revenue stream.
- Distribute the software to your students, that's why you are using free software
- WYSISWYG is a compromise – I use page description languages
- Avoid proprietary formats – my files are all stored as straight text files – they could be read on any computer capable of reading ascii codes.



2. Software Packages

The software pages that I use to perform a variety of tasks:

- Internet Explorer 5.5 — Best current browser
- NOTETAB LIGHT — Text editor optimized for creating web pages
- HTML TIDY — WWW Consortium HTML code syntax checker
- TopStyle Light — Cascading Style Sheet development tool
- Power Archiver — File compression tool
- WSFTP LE — FTP tool
- MikTeX — $\text{T}_{\text{E}}\text{X}$ $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ page description system
- WinEdt — $\text{T}_{\text{E}}\text{X}$ editor optimized for creating $\text{T}_{\text{E}}\text{X}$ $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ and web pages

- GhostScript — Postscript interpreter
- Ghostview — Ghostscript GUI shell
- Adobe Acrobat — PDF environment
- PYTHON 2.0 — General purpose computer programming language
- VPYTHON — Graphics toolkit for PYTHON
- F — FORTRAN 90 subset
- Salford Fortan — FORTRAN 77 environment
- MAPLE — Symbolic manipulation language
- MINITAB 12 — Statistical analysis
- Microsoft Office Suite — Best commercial tool, used if involved in collaboration with others who don't use page description tools

3. Software to Avoid

- WordPerfect 7, 8, 9 — COREL is a software broker, the pieces conflict
- CUTE FTP — Contains spyware
- WinZip — Contains spyware
- Net Vampire — Contains spyware
- Real Player — Contains spyware, rewrites “favorites”
- Word Processor web page creators — Make large, non-compliant web pages
- Microsoft Frontpage — Exploits Explorer only features, results unpredictable, and makes slow pages, often 40% of the code doesn't do anything!



4. PYTHON

The sole purpose of this page is to remind me to demonstrate PYTHON at this point

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