

Topics from Mr. Ken Sheppard, PC-Doctor

1 Ultimate Profiler

In this project you will design and build an application which helps users troubleshoot problems by answering the question "What has changed on my system?" This will involve using PC-Doctor's system information to scan the system to take snapshots of the hardware software and environmental information through time. With this information you will develop algorithms to identify the high-value information and display it to the user in a meaningful way. The core challenges in this project are identifying the valuable information as there are many thousands of fields available and visualizing it in a compelling and useful way.

2 Drive Visualizer

Hard disk drives are the least reliable components on a modern PC. Moreover, since they store all of the users work, from documents to personal photos, their failure can result in data loss. In this project you will develop a drive analysis tool which can gather information from a drive, perform benchmarking and provide statistical analysis and useful visualization of this data. PC-Doctor will provide the underlying source code to gather the detailed information and you will be responsible for analyzing the information, storing it in a local database and providing useful detailed visualization of the information to the analyst or end-user. The core challenges in this project are dealing with identifying missing and inconsistent data, and accurately benchmarking the drive so the validity of the data is high. A detailed and attractive display of the data will also be a significant part of this project.

3 Consumer Network Analysis

One of the most difficult problems for PC manufacturers today is helping users solve networking problems. Large PC OEMs receive many calls about configuring wireless networking, printing and Internet connectivity which take a long time on the phone to solve and leave the customers dissatisfied. In this project you will develop the foundational components to build a best-in-class consumer network analysis tool. This will involve gathering raw information from the network, analyzing it and providing to the end-user an appropriate interface to understand what is happening on their network. Benchmarking of the network will also be an important part of this project. PC-Doctor will provide the foundational software to gather the raw data from the network. You will be responsible for analyzing the data grading the benchmarking tools and providing an end-user appropriate display of this data. The key challenges to this project are in understanding the vast amounts of data available to analyze only what is important and in presenting it to the user in an appropriate and useful way.

4 Top 10 Ways to Clean Up Your PC

The Internet has numerous top 10 lists of ways to optimize or clean up your PC. In this project you will develop software which implements some of these strategies in one application. This project is very open-ended and the first step will be in analyzing the strategies and identifying the high value tasks which PC-Doctor has the capabilities to implement. Once the requirements are set you would implement a tool which performs the cleanup or optimization of the system. PC-Doctor would provide all of the data gathering and some of the code to actually perform the steps. You would be responsible for creating the application which displays the data and allows the user to perform the cleanup.