



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Sidharth D. Reddy	Project Number J1217
Project Title Software Speech Recognition	
Abstract Objectives/Goals My project analyzed the performance and accuracy of different software libraries and how well they compared against each other. Methods/Materials Four different software libraries: Scansoft's Dragon Naturally Speaking Version 6 and Dragon Professional Solution Version 6, IBM Via Voice Version 9, and a written program designed to see how well it functions in contrast of the other software. Each software was tested in different texts: basic grammar, medical, legal documents, computer, and scientific terminology. Five tests for each software and for each text were completed and accuracy and performance was recorded. This information was placed in graphs and charts with the variables for percent correct and for the test number. A data sheet was made from features such as installation time, microphone, vocabulary storage, and etc. Results Via Voice contained fewer mistakes in all test categories with over 90% accuracy in basic grammar and scientific terminology and above 80% in the other three. Dragon Standard ,however, had above 85% accuracy in basic grammar and scientific terminology and above 79% accuracy in medical, legal documents, and computer. The testing was done to show that both Standard and Via Voice were comparable and each had its own advantages over the other. Dragon Professional was used to notice how close Standard and Via Voice were in accuracy rate. The home-designed software was created to compare how well software brought in store performs against one that is created at home. Conclusions/Discussion The information shows that even though Via Voice had the least mistakes, it was missing several key features such as a user-friendly wizard, or a proper method to help fix problems and answer common questions, which both of the Dragon software had. Looking at the price the written software was the cheapest of all the software. Via Voice was approximately half the price of Dragon Standard, which does put some serious thought into which software is the best to buy and use.	
Summary Statement My project is about the analyzation, testing, and comparison of different software libraries.	
Help Received Father taught how to write programs, helped prepare board, and made sure the testing was conducted properly.	