



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Tina A. Zolfaghari	Project Number J1326
Project Title iRobot	
Abstract Objectives/Goals My main goal was to build a robot that commands by my voice. I also wanted to learn how to put together electronic components using a soldering iron, static mat, and other electronic devices. I wanted to also learn how to write a program. Methods/Materials Mark III Robot Kit(ooPIC) Firefly Bluetooth RS-232 Adapter Apple Laptop Speech Recognition-Mac Based ooPIC Software Development Tool(IDE) Parallels (To Run Windows for IDE) MacOS (Unix) Static Mat Tool Kit Soldering Iron Batteries Results After assembling all the parts I tested the unit and found out that there was a short were I solderered. After I fixed the problem the green LED light came on indicating that all parts where working. Then I had to upload a program into the robot. When everything was finished I had to test everything all together. When I said forward it would go forward in a circle and when I said back it would go back in a circle. This was because the servo motors where not aligned. Using a screwdriver I aligned the servo motors.The project was finished. Conclusions/Discussion I learned several things.I learened a handy phrase to remind me how to read the values of resistors. I also learened about Ohms law.I learned what speech recognition is.I also learned a little programming in C language.I learned about basic electrtricity.	
Summary Statement I built a voice activated robot.	
Help Received Teacher helped with Robot assembly and software program.	