Proposal

SCHOOL NAME: Jackson Middle School

AREA OF SCIENCE: Computer Science

PROJECT TITLE: Stuxnet

TEAM MEMBERS: Nancy Avila (<u>nancyavila.lpslover123@gmail.com</u>)

Tiffany Chau (<u>doantiffany7418@gmail.com</u>)
Brandon Pham (<u>brandon.pham243@gmail.com</u>)

Laisbiel Garcia (garcialaisbie@gmail.com)

SPONSORING TEACHER(s): Ms. Lunsford

PROJECT MENTOR(s): Karen Glennon

OUR PROBLEM: Our problem is about a computer worm that is targeting the Programmable Logic Controllers. The computer worm we have chosen is Stuxnet. What we know so far is that viruses can be transferred from one vessel to another, but what we do know about stuxnet is that it is a controlled computer worm. Stuxnet can spread to its chosen target and stop, after the fourth infected computer. Stuxnet also infects industrial systems.

OUR PURPOSE: What we hope to accomplish is to explain why and how stuxnet gets into computers and "infect" them. A question we hope to answer is: How was it made, and who made it?

OUR PLAN: We plan to do research and compare and contrast the damages done to the operating system and the whole software in general. It will be difficult because virus' don't target the same software, like Microsoft Windows.

CODING: The computer program we are using this year is NetLogo for programming the code. Our code will be showing something called a network theory. Network theory is a complex interacting system. There are a bunch of vertices connected by edges. We plan to use the Network theory as an example to help us code.