

## **Project Title: LCS Master Console Event Message Reduction**

### **Abstract Summary:**

System monitoring and control (SMC) message browsers receive so many messages daily that operators are unable to keep track all of them. Important messages are often mixed up among the less important ones. My job is to reduce the messages so that warning and emergency messages can be seen easily and therefore, responded promptly. There are multiple methods to achieve this. Firstly, messages that look the same should not appear many times in the message browser. Instead, the message should appear only once but with a number that counts the times that it appears. This method is called duplicate message suppression. Messages that display "normal" or "advisory" alarm level should be suppressed. Secondly, messages that update the most recent status of a system should replace the old-status messages. This method is called state based message correlation. Thirdly, some unnecessary messages should be sent straight to history after being displayed or not displayed at all. For an example, normal messages that are not a response to an operator's action should not be displayed. I also work on fixing messages that are not color-coded and formatted properly.