Research Experience for High School Students Project Description

Project Title: SDSC Datacenter Network Performance Monitoring

Overall Research Project

This position(s) will be researching the use of and testing the deployment of the PerfSonar Toolkit on small inexpensive microcomputers that could be deployed as a flock of testers within a datacenter. The individuals working on this position will handle the installation, configuration, testing and then evaluation of a particular hardware platform for datacenter testing purposes.

Planned hardware for testing/deployment will be:
- EVS LIVA 32GB running Debian
- EVS LIVA 64GB running Debian
- ECS Liva-X 32GB running Debian
- GigaByte 8G running CentOS
- Intel NUC 8G running CentOS
- Zotac 8G running CentOS

Number of Students Requested: Two

Name of Lead person: Tom Hutton, Network Architect, San Diego Supercomputer Center, UCSD

Plan to Integrate Student into Group Activity:

Student will be expected to spend 50% of their time working on this project at SDSC and will be able to spend the other 50% remotely. Students will have opportunity to directly communicate with the SDSC staff programmers.

Student Prerequisite:

We are looking for students who are self-driven and able to work with minimal supervision. Student should have familiarity with the LINUX OS and basic operating system installation.

Number of hours per week: 7-14

Relevant Links:

San Diego Supercomputer Center:

http://www.sdsc.edu/