

Project Summary

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Versatile Networks Laboratory (VeNeLa) Project

The Mathematics, Computer, and Information Sciences (MCIS) Department at Jacksonville State University (JSU) is proposing to establish a versatile computer networks laboratory that will enhance its curriculum to meet the challenges presented by the rapid advancement of telecommunications technology. The laboratory will be designed for versatility, scalability and adaptability to new technology and will separately or concurrently be configured to handle four (4) protocols: 10Mbps ethernet, fast ethernet, asynchronous transfer mode (ATM), and fiber distributed data interface (FDDI) on token ring.

Currently, the course in computer networks is being taught without any hands-on laboratory exercise to reinforce class lectures. The laboratory exercises that are designed to be used in the proposed laboratory will dramatically change the way we teach several computer courses in the Department. Some of the laboratory projects and exercises are adaptations and implementations of exemplary materials from previous NSF grants of similar nature. Others are gathered from published literature expounding on successful networking projects which resulted from grants that were directly or indirectly supported by NSF. And finally, a major portion of these are designed based on the current state of networking technology and network traffic.

We anticipate that the proposed laboratory and its innovative activities will have a tremendous positive impact on the way we teach computer science not only at JSU but in the national setting as well.