

Computer Science Seminar

The Paraguin Project

*Bear Hall Room 206,
Wednesday April 16 , 2003,
12:00 noon*

*Dr. Clayton Ferner
cferner@uncwil.edu*

The goal of the Paraguin Project is to build an open-source parallelizing compiler that generates message-passing code that can execution on a distributed-memory system. Much research has been conducted on parallelizing compilers for shared-memory systems. However, distributed-systems, such as Beowulf clusters, are becoming very popular because of the lower costs. Unfortunately, research on compilers for these types of systems has lagged far behind research on compilers for shared-memory. The Paraguin Project is an attempt to stimulate research in this area.

This talk consists of two parts. In the first part, I will discuss the basics of how the compiler creates parallel code and message-passing code. In the second part, I will discuss how to use the compiler and will show some examples and results. I will conclude with open problems and the future direction of the project.