In this talk, I will be discussing the Beowulf-class cluster of computers that was built in the Department of Computer Science. I will briefly talk about the hardware used, some basic MPI constructs, and how to submit jobs, for those who may be interested in using this or other clusters.

I will then talk about the Paraguin Project. The goal of the Paraguin Project is to construct a parallelizing compiler that can generate MPI message-passing code suitable for a Beowulf cluster. I will discuss some of the techniques used to do this. I will also show an example program that was produced by the compiler.