A Little bit of Supercomputing history

Supercomputers play an important role in today's research world. They aid us to solve compute-intensive problems such as physical simulation, climate research, molecular modeling and so on. Before we get into how to operate on a supercomputer, let's revisit its history a bit.

History of Supercomputing

The history of supercomputing started in 1960s! with the `Atlas` at the **University of Manchester** and a series of computers at **Control Data Corporation (CDC)**, originally designed by *Seymour Cray* (pictured below).

Seymour Cray with Cray-1

The `Atlas` was a joint venture between **Ferranti** (a UK electrical engineering and equipment firm) and the **Manchester University** and was designed to operate at processing speeds approaching one microsecond per instruction, about one million instructions per second. The first Atlas was officially commissioned 1962 as one of the world's first supercomputers – considered to be the most powerful computer in the world at that time by a considerable margin.

However, Cray left CDC in 1972 to form his own company, **Cray Research**. Four years after leaving CDC, Cray delivered the 80 MHz `Cray 1` in 1976, and it became one of the most successful supercomputers in history.

The `Cray-2` released in 1985 was an 8 processor liquid cooled computer and Fluorinert was pumped through it as it operated. It performed at `1.9 gigaflops` and was the world's second fastest after `M-13` supercomputer in Moscow.

While the supercomputers of the 1980s used only a few processors, in the 1990s, machines with thousands of processors began to appear in **Japan and the United States**, setting new computational performance records. For example, the Intel's `Paragon` had 1,000-4,000 Intel i860 processors in various configurations, and was ranked the **fastest in the world** in 1993. The Paragon was a MIMD machine which connected processors via a high speed two dimensional mesh, allowing processes to execute on separate nodes, communicating via the **Message Passing Interface** or `MPI` (details to be discussed later).

If you want to know more about the supercomputing and its glorious past feel free to visit this website in relation to history of computers.