

## Scribe Notes

For the second part of class, all we did was presentations -

We started off with a few questions about Skinna:

- What kind of work did Skienna do?
  - He tried to create viruses that would reproduce slower by trying to create viruses with “unpopular codons” (codons that occur less frequently).
- Skiennas Gambling career:
  - He started off by creating a program to simulate Jai Alai and to predict victors based on team stats and the team’s history. He then moved on to other sports such as football. However he wasn’t too successful.

Julian was the first to present. His presentation was of course on Skienna. (Apparently, however, Julian needs to learn English before he learns computer science 😊).

Next, Professor Shasha asked us a few more questions, this time about Sussman:

- What is Sussman interested in?
  - Creating parallel computing for cells and biology. Using the redundancy of nature to create more robust computational machines.
- What did Sussman do before he was interested in biology?
  - Created Scheme (based on principles of lambda calculus).

Nick was next to present on Gerald Sussman.

- Simultaneous Assignment – everything is assigned on a clock, at the same time. This is not natural since in nature there is no “clock.” Things happen randomly.

More questions were asked, this time on Dennau:

- A little bit about Dennau:
  - Worked for IBM. Was interested in parallel processing and creating huge “dumb” processors in which each processor did one.
- How fast is a petaflop:
  - 1000 trillion computations per second.

Sirhey was next to present on Dennau.

- Be aware that the Cyclops64 and BlueGene an the GF11 are three different machines.

The last set of questions finally ensued:

- A little bit about Shaw:
  - He was interested in finance. Owns a multimillion dollar business. His femto-computer simulates the folding of proteins.
- Why was it called Non-Von?:
  - There was no bottlenecking that occurred while waiting for other processors to finish computation due to minimal “talking” between the processors. Von Neumann (whom George will discuss) proposed a computer architecture in which memory was separate from computation, a reasonable structure at the time, but one that is now avoided because of the time it takes to go from the processor to memory.

The last presentation was given by Jake, and with that the conclusion of that weeks class.