

METHOD FOR PROCESSING GENE SEQUENCING DATA AND APPARATUS FOR PROCESSING GENE SEQUENCING DATA

ABSTRACT

The embodiments of the disclosure provide a method for processing gene sequencing data. The method is applied to an apparatus for processing gene sequencing data. The apparatus includes an advanced RISC machine, ARM, architecture, a graphics processing unit, GPU, architecture, and a peripheral component interconnect, PCI, bus; the ARM architecture includes at least one central processing unit, CPU, module; the GPU architecture includes at least one GPU module. The method includes: obtaining, by a CPU module in an idle state, batches of gene sequencing data by reading gene sequencing data in batches; obtaining, by the CPU module in the idle state, a first algorithm and a second algorithm by dividing a gene analyzing method; obtaining, by the CPU module in the idle state, a plurality of reads by dividing each batch of gene sequencing data based on the first algorithm, and sending the plurality of reads and the second algorithm to a GPU module in an idle state; performing, by the GPU module in the idle state, a calculation on each read based on the second algorithm, and sending respective calculation results to the CPU module in the idle state; and obtaining, by the CPU module in the idle state, a batch processing result based on the calculation results and the first algorithm. This method divides the analyzing method to run parts of the method on the CPU module and the GPU module, which greatly improves data analyzing efficiency.

[Fig. 1]