Von Neumann Architecture

The von Neumann architecture is a computer architecture in which a processing unit that contains an arithmetic logic unit (ALU) and processor registers, a control unit that contains an instruction register and program counter, a memory that stores data and instructions, an external mass storage, and an input and output are all present. This architecture allows for faster computing because it separates memory and storage into different components. Furthermore, it makes programming easier because it allows for iterative calculations to be made. When a programmer needs to repeat a calculation multiple times, he or she can use loops that iterate through different sections of code without having to copy and paste individual lines repetitively.