Scope of the Journal

IJHPSA proposes and fosters discussion on all aspects of the design and implementation of high-performance architectures, which are centred around the concept of parallel processing. The journal will cover all types of advanced architectures ranging from pipelined structures, array processors and multiprocessor systems. Dedicated high-performance architectures and systems, as well as hardware and software design methods and tools, will also fall within the scope of IJHPSA.

Subject coverage:
Suitable topics include, but are not limited to:

- **Pipelining**
  - Pipelined architectures
  - Vectorisation methods
  - Vector processing
  - Dynamic pipelines
  - Pipeline chaining

- **Array Processors**
  - Interconnections network topologies, such as systolic, mesh, cube, etc.
  - Parallel algorithms for array processors
  - Associative array processors
  - Masking and routing mechanisms

- **Multiprocessor Systems**
  - Multiprocessor architectures
  - Tightly and loosely-coupled multiprocessors
  - Interconnection networks
  - Parallel memory organisation and multi-cache
  - Multiprocessing control

- **RISC Architectures**
  - Instruction set
  - Pipelined RISC architectures

- **Data Flow Systems**
  - Data-driven computing
  - Data flow architectures

- **VLSI Architectures**
  - VLSI computing structures
  - Dedicated VLSI architectures

- **Performance evaluation and new trends**
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