



## COMPUTER SYSTEM WITH INSTRUCTION PRE-SENDING

**WARF: P230167US01**

Inventors: Gurindar Sohi, Shyam Murthy

### The Invention

UW-Madison researchers have developed a system for pre-sending memory blocks to the higher levels of the memory hierarchy without the need for accurate and time-precise knowledge of processor micro-architectural events. Instead a high-level representation of memory block usage of a program is constructed and used to identify and pre-send memory blocks likely to be needed by the processor in the future based on memory blocks that are currently accessed. Preliminary studies suggest that this approach significantly decreases latencies in comparison to more tightly coupled prefetching approaches of greater complexity.

### Additional Information

#### For More Information About the Inventors

- [Gurindar Sohi](#)

#### Tech Fields

- [Information Technology : Hardware](#)

For current licensing status, please contact Emily Bauer at [emily@warf.org](mailto:emily@warf.org) or 608-960-9842