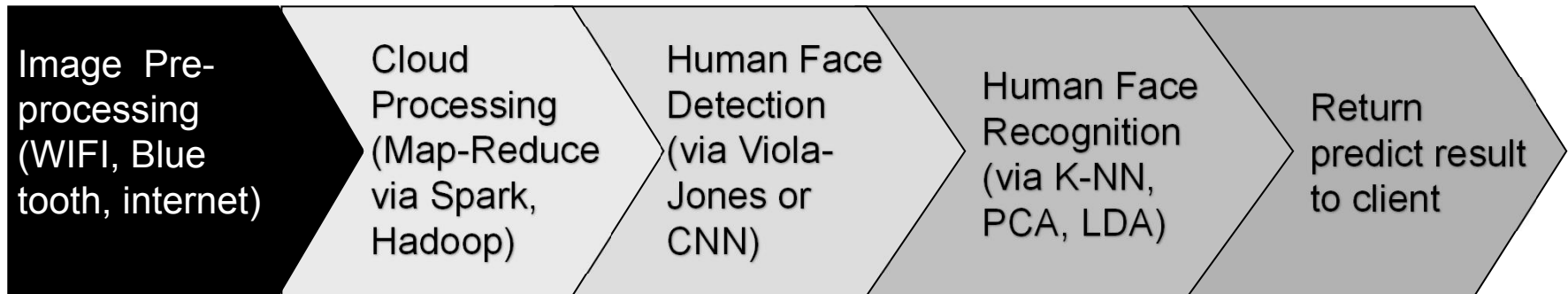


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Cloud-based real time face detection and recognition

Basic model:



Analogy: Suppose we need to finish 400m, if we had 4 “Usain Bolt”, can we get optimal?

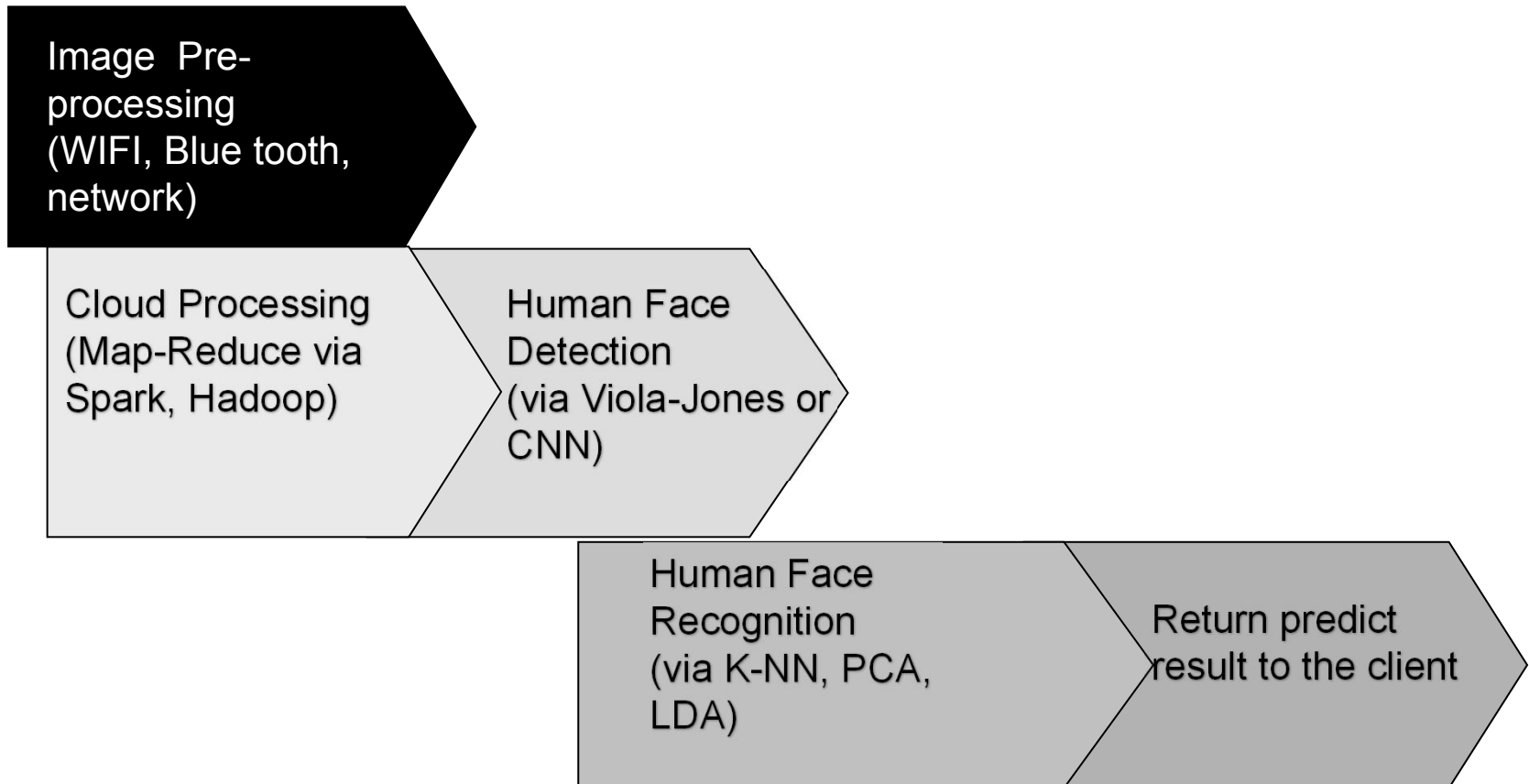
$9.58s + 9.58s + 9.58s + 9.58s = 38.32\text{ s}$

How about men's 4 × 100 m relay?

The world record: 36.84s (the Jamaican team at the 2012 London Olympic games)

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Improved model:



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- Challenges
 - Volume of monitor data (images)
 - Limited parallelization for the whole process
 - Huge computation costs
- We hope that:
 - find an efficient way to collect cloud data and send to supercomputer
 - parallel I/O (Comet file system)
 - parallelize the process as much as possible