1 THE TIME-BASED SIDE CHANNELS IN OUR ATT-TACK DATASETS

- Flush+Reload. As shown in the motivating example, this type of side channel first flushes a specific memory address (or cache line) from the cache, then waits for the victim to potentially access that memory (by transient execution in TEAs), and finally reloads the same address and measures the access time.
- Flush+Flush. This technique first flushes a specific memory address, then waits for the victim to potentially access that memory (by transient execution in TEAs), and finally repeatedly flushes a specific memory address and measures the execution time of the flushing instruction.
- *BTB-based.* This technique is similar in spirit to Flush+Reload, but instead of exploiting the CPU cache hierarchy, it targets the Branch Target Buffer (BTB) a structure used by modern processors for branch prediction.
- Prime+Probe. This technique first fills a specific cache set
 with their own data, then waits the victim to execute
 (potentially evicting some of the attacker's cache lines if
 it accesses the same set), and finally probes the cache by
 reaccessing their data and measuring the access latency.