

## Abstract

Cuckoo Hashing is a hashing scheme invented by Pagh and Rodler. It uses  $d \geq 2$  distinct hash functions to insert items into the hash table. It has been an open question for some time as to the expected time for Random Walk Insertion to add items. We show that if the number of hash functions  $d = O(1)$  is sufficiently large, then the expected insertion time is  $O(1)$  per item.