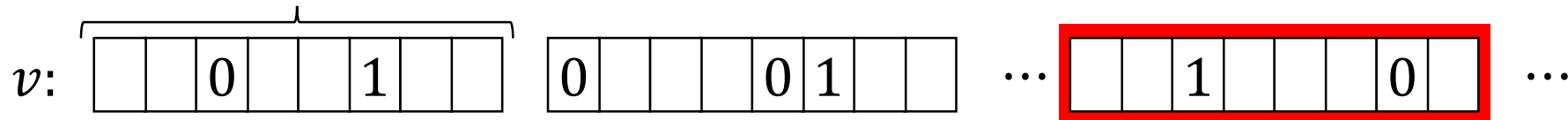


#neighbors in each bucket

$\sim \Theta(1)$ in expectation, $\mathcal{O}(\log n)$ max w.h.p. \Rightarrow #buckets \sim #neighbors



Algorithm

Step 1 pick a uniform random bucket
"fill" this bucket, if needed



Step 2 pick a uniform random neighbor u

└─ return or reject

Step 3 return u with probability $\frac{\text{\#neighbors in bucket}}{\mathcal{O}(\log n)}$
otherwise, try again