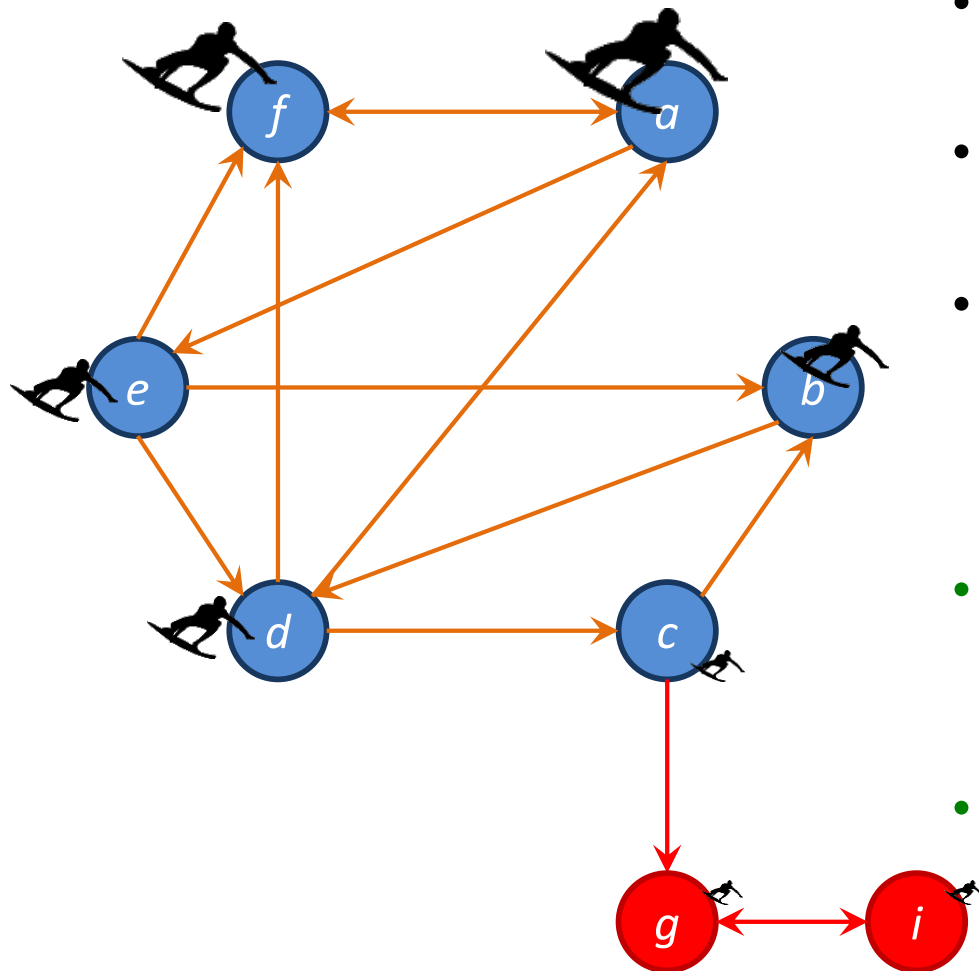


PageRank: Random Surfer Model



= someone surfing the web,
clicking links randomly



- What is the probability of being at page x after n hops?
- *Initial state*: surfer equally likely to start at any node
- PageRank applied iteratively for each hop: score indicates probability of being at that page after than many hops
- If the surfer reaches a page without links, the surfer randomly jumps to another page
- The surfer will jump to a random page at any time with a probability $1 - d$... *this avoids traps and ensures convergence!*