

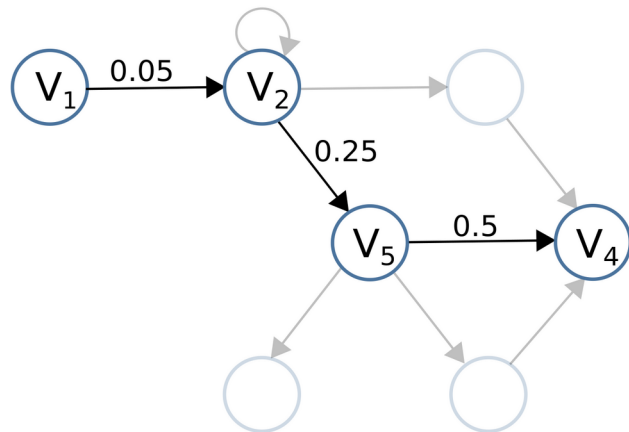
| i | $ V_i $ | $ \hat{V}_i $ |
|-----|---------|---------------|
| 1 | 1000 | 10 |
| 2 | 250 | 2.5 |
| 3 | 100 | 1 |
| 4 | 500 | 5 |
| 5 | 300 | 3 |
| 6 | 400 | 4 |
| 7 | 150 | 1.5 |

Block connection prob. p_{ij}

| | | | | | | |
|---|------|-----|------|------|-----|-----|
| 0 | 0.05 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0.1 | 0.3 | 0 | 0.25 | 0 | 0 |
| 0 | 0 | 0 | 0.1 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0.5 | 0 | 0.2 | 0.4 |
| 0 | 0 | 0 | 0.15 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Cost $c_{ij} := \frac{1}{p_{ij} |\hat{V}_i| |\hat{V}_j|}$

| | | | | | | |
|---|-----|------|------|------|------|------|
| 0 | 0.8 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1.33 | 0 | 0.53 | 0 | 0 |
| 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0.13 | 0 | 0.42 | 0.56 |
| 0 | 0 | 0 | 0.33 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Path:
 $\mathcal{P} = \{V_1, V_2, V_5, V_4\}$

Path length:
 $\ell(\mathcal{P}) = t_{12}c_{12} + t_{25}c_{25} + t_{54}c_{54}$
 $= (1 \times 0.8) + (0.5 \times 0.53) + (0.333 \times 0.42)$
 $= 1.205$

Fig 1-1. An illustrative example for calculating the path length of a random walk on the circuit.