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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Upcoming state | P(st+1|st-1 ,st=1,at) | | | | | | | | | | | | | | | |
| st-1 =1 | | | | st-1 =2 | | | | st-1 =3 | | | | st-1 =4 | | | |
| at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 |
| st+1 = 1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.7 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 |
| st+1 = 2 | 0.7 | 0.2 | 0.1 | 0.5 | 0.1 | 0.4 | 0.2 | 0.5 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 |
| st+1 = 3 | 0.1 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.1 | 0.1 | 0.5 | 0.4 | 0.1 | 0.5 |
| st+1 = 4 | 0.1 | 0.1 | 0.5 | 0.2 | 0.1 | 0.2 | 0.4 | 0.1 | 0.3 | 0.3 | 0.6 | 0.4 | 0.1 | 0.2 | 0.7 | 0.3 |

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| Upcoming state | P(st+1|st-1 ,st=2,at) | | | | | | | | | | | | | | | |
| st-1 =1 | | | | st-1 =2 | | | | st-1 =3 | | | | st-1 =4 | | | |
| at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 |
| st+1 = 1 | 0.8 | 0.4 | 0.1 | 0.1 | 0.2 | 0.6 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.5 | 0.3 |
| st+1 = 2 | 0.1 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 |
| st+1 = 3 | 0.05 | 0.1 | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | 0.6 | 0.1 | 0.3 | 0.15 | 0.6 | 0.2 | 0.4 | 0.1 | 0.1 |
| st+1 = 4 | 0.05 | 0.1 | 0.4 | 0.6 | 0.3 | 0.1 | 0.6 | 0.2 | 0.7 | 0.3 | 0.05 | 0.1 | 0.3 | 0.3 | 0.2 | 0.5 |

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| Upcoming state | P(st+1|st-1 ,st=3,at) | | | | | | | | | | | | | | | |
| st-1 =1 | | | | st-1 =2 | | | | st-1 =3 | | | | st-1 =4 | | | |
| at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 |
| st+1 = 1 | 0.4 | 0.2 | 0.1 | 0.2 | 0.4 | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| st+1 = 2 | 0.2 | 0.7 | 0.7 | 0.2 | 0.1 | 0.8 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| st+1 = 3 | 0.1 | 0.05 | 0.1 | 0.3 | 0.1 | 0.05 | 0.1 | 0.4 | 0.5 | 0.4 | 0.3 | 0.5 | 0.4 | 0.2 | 0.5 | 0.5 |
| st+1 = 4 | 0.3 | 0.05 | 0.1 | 0.3 | 0.4 | 0.05 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.1 |

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| Upcoming state | P(st+1|st-1 ,st=4,at) | | | | | | | | | | | | | | | |
| st-1 =1 | | | | st-1 =2 | | | | st-1 =3 | | | | st-1 =4 | | | |
| at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 | at=1 | at=2 | at=3 | at=4 |
| st+1 = 1 | 0.1 | 0.2 | 0.6 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.1 | 0.1 |
| st+1 = 2 | 0.7 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 |
| st+1 = 3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.7 | 0.1 | 0.2 | 0.5 | 0.2 | 0.2 | 0.4 | 0.5 |
| st+1 = 4 | 0.1 | 0.5 | 0.1 | 0.3 | 0.7 | 0.6 | 0.3 | 0.2 | 0.1 | 0.7 | 0.4 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 |