

Table 3

The results of computing the value of mean shift between hashes of the obfuscated and source code malware

| File number in the dataset | Source code hash values | Obfuscated source code hash values | Percentage of malware samples computee using convolutional neural networks | | | Percentage of malware samples computee using capsule neural network | | |
|----------------------------|---|---|--|----|-----|---|----|-----|
| | | | Training epoch | | | Training epoch | | |
| | | | I | II | III | I | II | III |
| 1. | e4d4bdb9f74ede47f97d9dd7c9d6ce67f09ed647 | b94cfd4dfb7dec64e9cddfd7d44df44df769d | 34 | 35 | 36 | 58 | 57 | 59 |
| 2. | dc7d9e6e6fddfd7d44bd6dfdbd44f0fdddf4fdd4 | be674fd47fe4debcdb7ed4e7e64fdf4d9cebdd44 | 31 | 30 | 32 | 54 | 56 | 57 |
| 3. | 4d4d9d4cf0f0d7dcd6ef9b67e6f09f44dfddfee | f46f0f0fddbf0f6bf4dfe4d44d744674ddd7def | 30 | 34 | 32 | 45 | 48 | 47 |
| 4. | df4dfdddff0f07d4d6dce6d7ecde499df67d4fb | 4d4dc4ddf99e4dc7f64df7e9dd7bfbec6d6fc64d | 40 | 42 | 41 | 59 | 61 | 60 |
| 5. | 6ed9bd74fd64be6f9e6dde76ddde6e6dfd744794 | f69fe4dd64d474e4def7d7eebd9df96b6df74dfd | 31 | 30 | 32 | 64 | 65 | 62 |
| 6. | edde6f7fde6cdee44dcd bdf4edddfd9d4df9bfdb | cfedfcd9d7bccf97dd7fbfd47e774f67dd6e6e4 | 29 | 31 | 32 | 59 | 57 | 58 |
| 7. | d4fee69dfde64bdf4bd9def464bdbcbcf74cfb | d6746d66f4efdfdf04d479fd9dbeede6dbfd77f | 34 | 35 | 35 | 61 | 60 | 62 |
| 8. | d44d9fd4c9fdb74f0ddd cfcdd6fdde64d6d4deef | 44ccdd6fd7f9f49dcddbd9dfdf4f0fcd bdfbd67 | 34 | 36 | 38 | 59 | 57 | 58 |
| 9. | 94dd4f6dd46f9dd6d6d74fc7ddb6dcff0df0bccb | ef0dc7d9dbefd7edc7dd497ef066b6bfd4e6d4ed | 30 | 32 | 34 | 58 | 57 | 58 |
| 10. | fcf4cfcefd46ff049fdbd7d7d4e64dce6c4df6cd | fdd4d4ddfc7ce4d4f9674b4dd7f4f0fd4cddfe9f | 29 | 30 | 34 | 61 | 62 | 61 |
| 11. | 4fd64d6dc6744d49c9f0fdc9e9cdf96ff0d9e69 | dc7f9ff077d4efbdde6bdfce64f4ddbdc66ed7e | 34 | 35 | 32 | 55 | 54 | 57 |
| 12. | efebfdd9dfdfdb9ddfcf9d79ff0d6de6b4dfc44e | dfd6d67cdfef74dc7f06dc4d47dc6ed6f0d74db | 30 | 32 | 34 | 49 | 55 | 52 |
| 13. | 76fcf4df0fd0dcd7ccfe696fd6f4c4f0dedbedf | 4fed7ee6b4eedbfd7cf9bf4cff0bc9dc94e6 | 34 | 35 | 34 | 48 | 49 | 47 |
| 14. | 1fd54dfdf4e9ced7ee9dfdfdd76ff0dd49cdfef | e6f0dfeee7e66cdedbcfd4b4fb4dddefdd9e79c | 30 | 32 | 34 | 49 | 51 | 53 |
| 15. | 79df9f9f0debf4fdf4cf69f7e64dd9fdd64df6 | 4edfee4c94f444df96e4ed9e7e667ddcd4e6ccbd | 31 | 34 | 35 | 50 | 54 | 58 |
| 16. | f6ed4ec66497d6ceddf74fcdbf94e6ff0d4d7fdb | f0de6dcfbfdfce694edfb6d4f7efedfdd4ed7dd | 30 | 34 | 35 | 52 | 54 | 55 |
| 17. | f0bebdbbfef0dd79f9fd4f4bfed7fddcdcf0cdc | 7bd4fbd9f6bfbde476fe6dd6f0f0e7bee4d7b7fe | 31 | 34 | 35 | 54 | 57 | 58 |
| 18. | d74cdcdfdddb97d447ed9fd9f97fbfd77f0becd | f06dbdc47dfcdfdfdcfd9ccede6ef79e7f44ddc96 | 30 | 35 | 36 | 57 | 59 | 58 |
| 19. | d9bfdcc7f7d7fd77de4f04fcde6df6fdee6feede | ff0dbdbd6f0f49bf7f446ddcd7df7ef97e94dfdd | 30 | 34 | 36 | 61 | 62 | 67 |
| 20. | 6bf7f4be6f0d4f0e66cf4d7fdec9f4feb4cdfbdd | dd7cdcdcbdbf0f06c7d6b6ed6f6d6cf7d9d7e4c | 29 | 27 | 28 | 42 | 45 | 47 |