FbHash: A New Similarity Hashing Scheme for Digital Forensics

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POVZETEK

nek povzetek

Kategorija in opis področja

E.3 [Data encryption]

Splošni izrazi

Hashing

Ključne besede

Data fingerprinting, Similarity digests, Fuzzy hashing, TF-IDF, Cosine-similarity

1. UVOD

Živimo v obdobju shranjevanja ogromnih količin podatkov. Pogosto je takih informacij preveč, da bi lahko vse ročno pregledali. Digitalni forenziki se tako soočijo s problemom avtomatizacije preiskave. Možna rešitev so algoritmi, kot so ssdeep, sdhash in FbHash, ki poskusijo filtrirati vnaprej znane "slabe" oziroma "dobre" datoteke. Ti algoritmi (angl. Approximate Matching algorithms) ugotavljajo delež ujemanja datotek s pomočjo (nekriptografskih) zgoščevalnih funkcij. Algoritma ssdeep in sdhash lahko preslepi aktivni napadalec, za algoritem fbhash pa učinkovitega napada ne poznamo.[1]

V 1. poglavju predstavimo algoritme ssdeep, sdhash, bb-hash in ${\tt mvHash-B}.\ V$ 2. poglavju ...

2. SORODNA DELA

Nekateri pomembnejši predniki algoritma FbHash so ssdeep, sdhash, bbhash in mvHash-B.

2.1 ssdeep

Algoritem s
sdeep temelji na principu zgoščevanja Context Triggered Piecewise Hash (CTPH), ki je predstavljen v članku
[2].

- 2.2 sdhash
- 2.3 bbhash
- 2.4 mvHash-B
- 3. ALGORITEM
- 4. NAŠI EKSPERIMENTI (NAME IN PROGRESS)

5. ZAKLJUČEK

This paragraph will end the body of this sample document. Remember that you might still have Acknowledgments or Appendices; brief samples of these follow. There is still the Bibliography to deal with; and we will make a disclaimer about that here: with the exception of the reference to the LaTeX book, the citations in this paper are to articles which have nothing to do with the present subject and are used as examples only.

6. ZAHVALA

Mogoče zahvala avtorjem za narjeno delo al kej.

7. REFERENCES

- D. Chang, M. Ghosh, S. K. Sanadhya, M. Singh, and D. R. White. Fbhash: A new similarity hashing scheme for digital forensics. In *The Digital Forensic Research* Conference, volume 29, pages S113–S123. DFRWS, July 2019.
- [2] J. Kornblum. Identifying almost identical files using context triggered piecewise hashing. *Digital Investigation*, 3:91–97, September 2006. The Proceedings of the 6th Annual Digital Forensic Research Workshop (DFRWS '06).

7.1 References

8. REFERENCES

- D. Chang, M. Ghosh, S. K. Sanadhya, M. Singh, and D. R. White. Fbhash: A new similarity hashing scheme for digital forensics. In *The Digital Forensic Research* Conference, volume 29, pages S113–S123. DFRWS, July 2019.
- [2] J. Kornblum. Identifying almost identical files using context triggered piecewise hashing. *Digital Investigation*, 3:91–97, September 2006. The Proceedings of the 6th Annual Digital Forensic Research Workshop (DFRWS '06).