

# Linguistic Steganography Annotated Bibliography 9/19/2018

## Items Listed by Year and Author

### 2001-2002

- Chapman, M., Davida, G. I., & Rennhard, M. (2001, October). A practical and effective approach to large-scale automated linguistic steganography. In *Intl. Conf. on Information Security* (pp. 156-165). Springer, Berlin, Heidelberg.  
CODE, WORD, REPL, SEM
- Chapman, M., & Davida, G. (2002). Plausible deniability using automated linguistic steganography. (sic) In *Infrastructure Security* (pp. 276-287). Springer, Berlin, Heidelberg.  
CODE, WORD, REPL, SEM

### 2004

- Bennett, K. (2004). *Linguistic steganography: Survey, analysis, and robustness concerns for hiding information in text*. CERIAS Tech Report 2004-13.  
SURV, CODE, DETECT, SEM
- Bergmair, R. (2004). *Towards linguistic steganography: A systematic investigation of approaches, systems, and issues*. Final year thesis, B. Sc.(Hons.) in Computer Studies, The University of Derby.  
SURV, CODE, WORD, REPL
- Bergmair, R. (2004, September). Natural Language Steganography and an "AI-complete" Security Primitive. *21st Chaos Communication Congress*,  
CODE, WORD, REPL
- Bolshakov, I. A., & Gelbukh, A. (2004, June). Synonymous paraphrasing using Wordnet and Internet. In *Intl. Conf. on Application of Natural Language to Information Systems* (pp. 312-323). Springer, Berlin, Heidelberg.  
CODE, WORD, REPL, SEM
- Bolshakov, I. A. (2004, May). A method of linguistic steganography based on collocational-verified synonymy. In *International Workshop on Information Hiding* (pp. 180-191). Springer, Berlin, Heidelberg.  
CODE, WORD, REPL, SEM

### 2005

- Grothoff, C., Grothoff, K., Alkhutova, L., Stutsman, R., & Atallah, M. (2005, June). Translation-based steganography. In *Intl. Workshop on Information Hiding* pp. 219-233). Springer, Berlin, Heidelberg.  
CODE, TRANS, SENT, SEM
- Takizawa, O., Makino, K., Matsumoto, T., Nakagawa, H., & Murase, I. (2005, September). Method of hiding information in agglutinative language documents using adjustment to new line positions. In *Intl. Conf. on Knowledge-Based and Intelligent Information and Engineering Systems* (pp. 1039-1048). Springer, Berlin, Heidelberg.  
CODE, INS, FORM, LANG(Japanese, Korean)
- Topkara, M., Taskiran, C. M., & Delp, E. J. (2005, March). Natural language watermarking. In *Security, Steganography, and Watermarking of Multimedia Contents VII 5681*, pp. 441-453). Intl. Society for Optics and Photonics.  
WATER, CODE, COMB, SENT, SYNT - trans grammar

## 2006

- Bergmair, R., & Katzenbeisser, S. (2006, July). Content-aware steganography: about lazy prisoners and narrow-minded wardens. In *Intl. Workshop on Information Hiding* (pp. 109-123). Springer, Berlin, Heidelberg.  
CODE, WORD, REPL, SEM
- Chand, V., & Orgun, C. O. (2006, January). Exploiting linguistic features in lexical steganography: design and proof-of-concept implementation. In *System Sciences, 2006. HICSS'06. Proc. 39th Annual Hawaii Intl. Conf. on* 6 126b-126b . IEEE.  
CODE, WORD, REPL, SEM, CRYPT
- Shirali-Shahreza, M. H., & Shirali-Shahreza, M. (2006, July). A new approach to Persian/Arabic text steganography. In *1st IEEE/ACIS Intl. Workshop on Component-Based Software Engineering, Software Architecture and Reuse. ICIS-COMSAR 2006. 5th IEEE/ACIS Intl. Conf. on* (pp. 310-315). IEEE.
- Stutsman, R., Grothoff, C., Atallah, M., & Grothoff, K. (2006, April). Lost in just the translation. In *Proc. 2006 ACM symposium on Applied computing* (pp. 338-345). ACM.  
CODE, TRANS, SENT, SEM  
CODE, SYMB, REPL, GLYPH, LANG(Arabic, Persian)
- Taskiran, C. M., Topkara, U., Topkara, M., & Delp, E. J. (2006, February). Attacks on lexical natural language steganography systems. In *Security, Steganography, and Watermarking of Multimedia Contents VIII (Vol. 6072, p. 607209)*. Intl. Society for Optics and Photonics.  
DETECT, WORD, REPL, SEM
- Topkara, U., Topkara, M., & Atallah, M. J. (2006, September). The hiding virtues of ambiguity: quantifiably resilient watermarking of natural language text through synonym substitutions. In *Proc. 8th workshop on Multimedia and security* (pp. 164-174). ACM.  
WATER, WORD, REPL, SEM

- Topkara, M., Topkara, U., & Atallah, M. J. (2006, October). Words are not enough: sentence level natural language watermarking. In *Proc. 4th ACM Intl. workshop on Contents protection and security* (pp. 37-46). ACM.  
WATER, WORD, REPL, SYNT

## 2007

- Gutub, A., & Fattani, M. (2007). A novel Arabic text steganography method using letter points and extensions. [www.researchgate.com](http://www.researchgate.com) 8/31/2018.  
CODE, SYMB, REPL, LANG(Arabic)
- Liu, T. Y., & Tsai, W. H. (2007). A new steganographic method for data hiding in Microsoft word documents by a change tracking technique. *IEEE Trans. on Information Forensics and Security*, 2(1), 24-30.  
CODE, GEN, DEL, REPL, PERM, WORD, PHR, FORM
- Meral, H. M., Sevinc, E., Ünkar, E., Sankur, B., Özsoy, A. S., & Güngör, T. (2007, March). Syntactic tools for text watermarking. In *Security, Steganography, and Watermarking of Multimedia Contents IX* (Vol. 6505, p. 65050X). Intl. Society for Optics and Photonics.  
WATER, WORD, REPL, SENT, COMB, LANG(Turkish)
- Murphy, B., & Vogel, C. (2007, February). Statistically-constrained shallow text marking: techniques, evaluation paradigm and results. *Security, Steganography, and Watermarking of Multimedia Contents IX* (Vol. 6505, p. 65050Z). Intl. Society for Optics and Photonics.  
CODE, WORD, REPL, SEM
- Topkara, M., Topkara, U., & Atallah, M. J. (2007, February). Information hiding through errors: a confusing approach. In *Security, Steganography, and Watermarking of Multimedia Contents IX* (Vol. 6505, p. 65050V). Intl.  
CODE, WORD, INS, DEL, REPL, ERR, SPELL
- Vybornova, O., & Macq, B. (2007, August). Natural language watermarking and robust hashing based on presuppositional analysis. In *Information Reuse and Integration, 2007. IRI 2007. IEEE International Conference on* (pp. 177-182). IEEE.  
WATER, PERM, COMB, PHR, SENT, SEM
- Yuling, L., Xingming, S., Can, G., & Hong, W. (2007, July). An efficient linguistic steganography for Chinese text. In *Multimedia and Expo, 2007 IEEE Intl. Conf. on* (pp. 2094-2097). IEEE.CODE,  
WORD, REPL, LANG(Chinese)

## 2008

- Chen, Z., Huang, L., Yu, Z., Yang, W., Li, L., Zheng, X., & Zhao, X. (2008, March). A statistical algorithm for linguistic steganography detection based on distribution of words. In *Computer and Information Technology Workshops, 2008. CIT Workshops 2008. IEEE 8th Intl. Conf. on* (pp. 224-229). IEEE.

DETECT, STAT

- Chen, Z., Huang, L., Yu, Z., Yang, W., Li, L., Zheng, X., & Zhao, X. (2008, May). Linguistic steganography detection using statistical characteristics of correlations between words. In *Intl. Workshop on Information Hiding* (pp. 224-235). Springer, Berlin, Heidelberg.

DETECT, STAT, REV

- Chen, Z. L., Huang, L. S., Yu, Z. S., Zhao, X. X., & Zhao, X. L. (2008, July). Effective linguistic steganography detection. In *Computer and Information Technology Workshops, 2008. CIT Workshops 2008. IEEE 8th Intl. Conf. on* ( pp. 224-229). IEEE.

DETECT, STAT, REV

- Desoky, A., Younis, M., & El-Sayed, H. (2008, December). Auto-summarization-based steganography. In *Innovations in Information Technology, 2008. IIT 2008. Intl. Conf. on* (pp. 608-612). IEEE.

CODE, SUM, SEM

- El Abbadi, N. K. (2008). New Algorithm for Text in Text Steganography. *Al-Rafidain University College For Sciences*, (23), 99-112.

CODE, GLYPH, FORM

- Gutub, A., Elarian, Y., Awaideh, S., & Alvi, A. (2008). Arabic text steganography using multiple diacritics. [www.researchgate.com](http://www.researchgate.com) 8/31/2018.

CODE, SYMB, REPL, SPELL, LANG(Arabic),

- Kim, M. Y. (2008, July). Text watermarking by syntactic analysis. In *Proc. of WSEAS Intl. Conferences on Computers* (pp. 904-909).

CODE, WORD, PHRASE, PERM, SYNT, LANG(Korean)

- Liu, Y., Sun, X., Liu, Y., & Li, C. T. (2008). MIMIC-PPT: Mimicking-based steganography for Microsoft Power Point document. *Inform. Technol. Journal* 7, 654-660.

CODE, WORD, REPL, FORM

- Memon, J. A., Khawaja, K., & Kazi, H. (2008). Evaluation of Steganography for Urdu/Arabic Text. *Journal of Theoretical & Applied Information Technology*, 4(3).

CODE, SYMB, REPL, GLYPH, LANG(Urdu, Arabic)

- Nanhe, A. M., Kunjir, M. P., & Sakdeo, S. V. (2008). Improved Synonym Approach to Linguistic Steganography Design and Proof-of-Concept Implementation. [www.academia.edu](http://www.academia.edu) 8/31/2018

CODE, WORD, REPL, SEM

- Por, L. Y., Ang, T. F., & Delina, B. (2008). Whitesteg: a new scheme in information hiding using text steganography. *WSEAS Trans. on Computers*, 7(6), 735-745.

CODE, SYMB, INS, FORM

- Por, L. Y., & Delina, B. (2008, April). Information hiding: A new approach in text steganography. In *WSEAS Intl. Conference. Proc. Mathematics and Computers in Science and Engineering* (No. 7). World Scientific and Engineering Academy and Society.

CODE, SYMB, INS, FORM, REV

- Por, L. Y., Ang, T. F., & Delina, B. (2008). Whitesteg: a new scheme in information hiding using text steganography. *WSEAS Trans. on Computers*, 7(6), 735-745.

CODE, SYMB, INS, FORM, REV

- Shirali-Shahreza, M., & Shirali-Shahreza, S. (2008). High capacity Persian-Arabic text steganography. *Applied Sci*, 8, 4173-4179.  
CODE, SYMB, REPL, FORM, LANG(Persian, Arabic)
- Tidake, M. V., Pukale, S. G., & Dhore, M. L. (2008). Steganography in MS Word Document using its In-built Features. *Proc. ICCNS*, 8, 27-28.  
CODE, FORM, INS, DEL, WORD,
- Wang, H., Sun, X., Liu, Y., & Liu, Y. (2008). Natural language watermarking using Chinese syntactic transformations. *Information Technology Journal*, 7(6), 904-910.  
WATER, WORD, PHRASE, PERM, SYNT, LANG(Chinese)
- Wyseur, B., Wouters, K., & Preneel, B. (2008). Lexical natural language steganography systems with human interaction. In *ECIW2008-7th European Conf. on Information Warfare and Security: ECIW2008* (p. 313). Academic Conferences Limited.  
CODE, WORD, REPL, SEM
- Yu, Z., Huang, L., Chen, Z., Li, L., Zhao, X., & Zhu, Y. (2008, December). Detection of synonym-substitution modified articles using context information. In *Future Generation Communication and Networking, 2008. FGCN'08. Second Intl. Conf. on* (Vol. 1), pp. 134-139). IEEE.  
DETECT, WORD, REPL, SEM

## 2009

- Al-Haidari, F., Gutub, A., Al-Kahsah, K., & Hamodi, J. (2009, May). Improving security and capacity for Arabic text steganography using 'Kashida' extensions. In *Computer Systems and Applications, 2009. AICCSA 2009. IEEE/ACS Intl. Conf. on* ( pp. 396-399). IEEE.  
CODE, SYMB, REPL, GLYPH, LANG(Arabic)
- Desoky, A., & Younis, M. (2009). Chestega: chess steganography methodology. *Security and Communication Networks*, 2(6), 555-566.  
CODE, DETECT, MULTI, DOM
- Grothoff, C., Grothoff, K., Stutsman, R., Alkhutova, L., & Atallah, M. (2009). Translation-based steganography. *Journal of Computer Security*, 17(3), 269-303.  
CODE, TRANS, SENT, SEM, REV
- Kermanidis, K. L., & Magkos, E. (2009, March). Empirical paraphrasing of modern Greek text in two phases: an application to steganography. *Intl. Conf. on Intelligent Text Processing and Computational Linguistics* (pp. 535-546). Springer, Berlin, Heidelberg.  
CODE, SUM, GRAM, LANG(Greek)
- Mansor, S., Din, R., & Samsudin, A. (2009). Analysis of natural language steganography. *Intl. Journal of Computer Science and Security IJCSS*, 3(2), 113.  
SURV
- Meral, H. M., Sankur, B., Özsoy, A. S., Güngör, T., & Sevinç, E. (2009). Natural language watermarking via morphosyntactic alterations. *Computer Speech & Language*, 23(1), 107-125.  
WATER, WORD, INS, REPL, LANG(Turkish)

- Oren, Y., & Wool, A. (2009). Perfect privacy for webmail with secret sharing.  
[www.semanticscholar.org](http://www.semanticscholar.org) 8/31/2018  
 CODE, MULTI, WORD,
- Singh, H., Singh, P. K., & Saroha, K. (2009, February). A survey on text based steganography. In *Proc. 3rd National Conf. INDIA-COM-2009* (pp. 26-27).  
 SURV

## 2010

- Adesina, A. O., Nyongesa, H. O., & Agbele, K. K. (2010, May). Digital watermarking: A state-of-the-art review. In *IST-Africa, 2010* (pp. 1-8). IEEE.  
 WATER, SURV
- Ali, A., & Moayad, F. (2010). Arabic text steganography using Kashida extensions with Huffman code. *Journal of Applied Sciences*, 10, 436-439.  
 CODE, SYMB, REPL, GLYPH, LANG(Arabic)
- Bhattacharyya, S., Banerjee, I., & Sanyal, G. (2010, July). Design and implementation of a Secure Text Based Steganography Model. In *Security and Management* (pp. 690-696).  
 CODE, FORM, INS, GLYPH
- Bhattacharyya, S., Sinha, D., & Sanyal, G. (2010). A Secured Data Transmission Technique Using The Combined Approach Of Text And Image Steganography. [Researchgate.com](http://Researchgate.com) 8/31/2018  
 CODE, FORM, INS, GLYPH, REV
- Chang, C. Y., & Clark, S. (2010, October). Practical linguistic steganography using contextual synonym substitution and vertex colour coding. In *Proc. 2010 Conf. on Empirical Methods in Natural Language Processing* (pp. 1194-1203). Association for Computational Linguistics.  
 CODE, SYMB, REPL, SEM
- Chang, C. Y., & Clark, S. (2010, June). Linguistic steganography using automatically generated paraphrases. In *Human Language Technologies: The 2010 Annual Conf. of the North American Chapter of the Association for Computational Linguistics* (pp. 591-599). Association for Computational Linguistics.  
 CODE, SUM, SEM
- Changder, S., Ghosh, D., & Debnath, N. C. (2010, July). LCS based text steganography through Indian Languages. In *Computer Science and Information Technology (ICCSIT), 2010 3rd IEEE Intl. Conf. on* (Vol. 8, pp. 53-57). IEEE.  
 CODE, SYMB, INS, SYNT, MULTI, LANG(Indian)
- Chen, Z., Huang, L., Meng, P., Yang, W., & Miao, H. (2010, October). Blind linguistic steganalysis against translation based steganography. *Intl. Workshop on Digital Watermarking* (pp. 251-265). Springer, Berlin, Heidelberg.  
 DETECT, TRANS, STAT
- Fiore, U. (2010). Selective redundancy removal: a framework for data hiding. *Future Internet*, 2(1), 30-40.  
 CODE, DEL, FORM, DOM

- Gutub, Adnan, Ghouti, Lahouri, Elarian, Yousef, Awaideh, Sameh, & Alvi, A. K. (2010). Utilizing diacritic marks for Arabic text steganography. *Kuwait Journal of Science & Engineering (KJSE)*, 37(1), 89-109.  
CODE, REPL, SYMB, GLYPH, LANG(Arabic)
- Kim, M. Y., Zaiane, O. R., & Goebel, R. (2010, July). Natural language watermarking based on syntactic displacement and morphological division. In *Computer Software and Applications Conf. Workshops (COMPSACW), 2010 IEEE 34th Annual* (pp. 164-169). IEEE.  
WATER, WORD, SENT, REPL, PERM, SPELL, SYNT, LANG(Korean)
- Morran, M., & Weir, G. R. (2010, September). An Approach to Textual Steganography. *Intl. Conf. on Global Security, Safety, and Sustainability* (pp. 48-54). Springer, Berlin, Heidelberg.  
CODE, WORD, REPL, SEM
- Munoz, A., Carracedo, J., & Álvarez, I. A. (2010, June). Measuring the security of linguistic steganography in Spanish based on synonymous paraphrasing with WSD. In *2010 10th IEEE Intl. Conf. on Computer and Information Technology (CIT 2010)* (pp. 965-970). IEEE.  
CODE, WORD, REPL, LANG(Spanish)
- Muñoz, A., Carracedo, J., & Álvarez, I. A. (2010, June). Hiding short secret messages based on linguistic steganography and manual annotation. In *Computer and Information Technology (CIT), 2010 IEEE 10th Intl. Conf. on* (pp. 960-964). IEEE.  
CODE, WORD, REPL, MULTI, LANG(Spanish)
- Pathak, M. (2010). A new approach for text steganography using Hindi numerical code. *Intl. Journal Comput Appl*, 1(8), 199-202.  
CODE, NUM, GLYPH, SPELL, LANG(India)
- Popovic, N., Mircevski J. (2010) About Feasible usage of the Steganography in Public Administration. In *7th Intl. Conf. for Informatics and Information Technology, 2010*.  
SURV, CODE
- Rafat, K. F., & Sher, M. (2010). State Of The Art In Digital Steganography Focusing ASCII Text Documents. *Intl. Journal of Computer Science & Information Security* 7(2) , 63-72.  
SURV
- Shirali-Shahreza, M. H., & Shirali-Shahreza, M. (2010). Arabic/Persian text steganography utilizing similar letters with different codes. *The Arabian Journal For Science And Engineering*, 35(1b).  
CODE, SYMB, REPL, GLYPH, LANG(Arabic, Persian)
- Urbanovich, P., Chourikov, K., Rimorev, A., & Urbanovich, N. (2010). Text steganography application for protection and transfer of the information. [www.belstu.by](http://www.belstu.by) 8/31/2018  
SURV
- Vaughn, R. (2010). *U.S. Patent No. 7,646,868*. Washington, DC: U.S. Patent and Trademark Office. Method for Steganographic Cryptography.  
CODE, WORD, REPL
- Weir, G. R., & Morran, M. (2010). Hiding the hidden message: approaches to textual steganography. *Intl. Journal of Electronic Security and Digital Forensics*, 3(3), 223-233.  
CODE, WORD, REPL

- Yang, H., & Cao, X. (2010). Linguistic steganalysis based on meta features and immune mechanism. *Chinese Journal of Electronics*, 19(4), 661-666.  
DETECT, WORD, STAT
- Zaidan, A. A., Zaidan, B. B., Al-Frajat, A. K., & Jalab, H. A. (2010). Investigate the capability of applying hidden data in text file: An overview. *Journal of Applied Sciences (Faisalabad)*, 10(17), 1916-1922.  
SURV, CODE

## 2011

- Banerjee, I. (2011). Text Steganography using Article Mapping Technique (AMT) and SSCE. *Journal of Global Research in Computer Science*, 2(4).  
CODE, GLYPH, REPL, NUM, MULTI
- Bhattacharyya, S., Banerjee, I., & Sanyal, G. (2011). Bengali steganography using CALP with a novel Bengali word processor. *INFOCOMP*, 10(4), 40-56.  
CODE, GLYPH, REPL, NUM, LANG(Bengali)
- Bhattacharyya, S. (2011). Hiding data in text through changing in alphabet letter patterns (CALP). *Journal of Global Research in Computer Science*, 2(3).  
CODE, GLYPH, REPL, NUM, REV
- Bhattacharyya, S. (2011). Text Steganography using CALP with High Embedding Capacity. *Journal of Global Research in Computer Science*, 2(5), 29-36.  
CODE, GLYPH, REPL, NUM, REV
- Banerjee, I., Bhattacharyya, S., & Sanyal, G. (2011, January). Novel text steganography through special code generation. In *Intl. Conf. on Systemics, Cybernetics and Informatics* (pp. 298-303).  
CODE, GLYPH, REPL, NUM, REV
- Castiglione, A., D'Alessio, B., De Santis, A., & Palmieri, F. (2011). Hiding Information into OOXML Documents: New Steganographic Perspectives. *JoWUA*, 2(4), 59-83.  
CODE, FORM, MULTI
- Danková, E., Fanfara, P., Ádám, N., & Dufala, M. (2011). Source file copyright protection. *Intl. Scientific Conf. Informatics 2011*, 132-137.  
WATER, FORM, MULTI
- Desoky, A. (2011). Matlist: Mature linguistic steganography methodology. *Security and Communication Networks*, 4(6), 697-718.  
CODE, NUM, GEN, DOM
- Fu, Z., Sun, X., Zhang, J., & Li, B. (2011). A novel watermark embedding and detection scheme based on zero-knowledge proof. *Intl. Journal of Digital Content Technology and Its Applications*, 5(3), 273-286.  
WATER, FORM, DOM
- Grosvald, M., & Orgun, C. O. (2011). Free from the cover text: a human-generated natural language approach to text-based steganography. *Journal of Information Hiding and Multimedia Signal Processing*, 2(2), 133-141.  
CODE, GEN, WORD,

- Khairullah, M. (2011). A novel text steganography system in cricket match scorecard. *Intl. Journal of Computer Applications*, 21, 43-47.  
CODE, FORM, DOM, NUM
- Kermanidis, K. L. (2011). Capacity-rich knowledge-poor linguistic steganography. *Journal of Information Hiding and Multimedia Signal Processing*, 2(3), 247-258.  
CODE, PERM, WORD, PHR, SYNT, LANG(Greek)
- Lakshmeeswari, G., Rajya Lakshmi, D., & Lalitha Bhaskari, D. (2011). Extended Encoding of Telugu text for hiding compatibility. *Intl. Journal of Computer Applications*, 9(7), 19-23.  
CODE, NUM, GLYPH, SPELL, LANG(Telegu)
- Meng, P., Shi, Y. Q., Huang, L., Chen, Z., Yang, W., & Desoky, A. (2011, May). LinL: Lost in n-best list. In *Intl. Workshop on Information Hiding* (pp. 329-341). Springer, Berlin, Heidelberg.  
CODE, TRANS
- Mir, N. (2011). Robust techniques of web watermarking. *Intl. Journal of Computer Science and Information Security*, 9(2), 248-252.  
WATER, WORD, MULTI
- Nechta, I., & Fionov, A. (2011). Applying statistical methods to text steganography.  
[www.arxiv.org 8/31/2018](http://www.arxiv.org/8/31/2018)  
CODE, DETECT, SURV
- Popovic, N., & Mircevski, J. (2011). Suitable forms of Steganography Usage in Public Administration. *8th Conf. on Informatics and Information Technology (CIIT)*, 3-7.  
SURV, CODE, REV
- Tatar, U., & Mataracioglu, T. (2011). Analysis and Implementation of Distinct Steganographic Methods. [www.arxiv.org 8/31/2018](http://www.arxiv.org/8/31/2018)  
SURV, CODE, MULTI
- Wai, E. N. C., & Khine, M. A. (2011). Syntactic bank-based linguistic steganography approach. In *2011 Intl. Conf. on Information Communication and Management IPCSIT* (Vol. 16).  
CODE, PHR, WORD, REPL, PERM, SYNT, MULTI
- Wai, E. N. C., & Khine, M. A. (2011). Modified Linguistic Steganography Approach by Using Syntax Bank and Digital Signature. *Intl. Journal of Information and Education Technology*, 1(5), 410.  
CODE, PHR, WORD, REPL, PERM, SYNT, MULTI, REV
- Xiang, L., Sun, X., Liu, Y., & Yang, H. (2011). A secure steganographic method via multiple choice questions. *Information Technology Journal*, 10(5), 992-1000.  
CODE, REPL, FORM, DOM
- Yang, B., Sun, X., Xiang, L., Ruan, Z., & Wu, R. (2011). Steganography in Ms Excel document using text-rotation technique. *Information Technology Journal*, 10(4), 889-893.  
CODE, FORM, DOM, MULTI

- Banerjee, I., Bhattacharyya, S., & Sanyal, G. (2012). A procedure of text steganography using Indian regional language. *Intl. Journal of Computer Network and Information Security*, 4(8), 65. CODE, FORM, INS, GLYPH, LANG(India)
- Banerjee, I., Bhattacharyya, S., & Sanyal, G. (2012). Text steganography using quantum approach in regional language with revised SSCE. *Intl. Journal of Computer Network and Information Security*, 4(12), 73. CODE, FORM, INS, GLYPH, LANG(India), REV
- Banerjee, I., Bhattacharyya, S., & Sanyal, G. (2012). Text Steganography through Quantum Approach. In *Wireless Networks and Computational Intelligence* (pp. 632-643). Springer, Berlin, Heidelberg. CODE, FORM, INS, GLYPH, LANG(India), REV
- Bassil, Y. (2012). A generation-based text steganography method using SQL queries. *Intl. Journal of Computer Applications*, 57(12). CODE, GEN, DOM
- Chang, C. Y., & Clark, S. (2012). Adjective deletion for linguistic steganography and secret sharing. *Proc. COLING 2012*, 493-510. CODE, WORD, DEL, SEM, MULT, STAT
- Chang, C. Y., & Clark, S. (2012). The secret's in the word order: Text-to-text generation for linguistic steganography. *Proc. COLING 2012*, 511-528. CODE, WORD, PHR, PERM, SYNT
- Chuang, J. C., & Hu, Y. C. (2012). Data Hiding on Text Using Big-5 Code. *Intl. Journal of Security and Its Applications*, 6(2), 173-178. CODE, GLYPH, INS, LANG(Chinese)
- Din, R., Tuan Muda, T. Z., Lertkrai, P., Omar, M. N., Amphawan, A., & Aziz, F. A. (2012). Text steganalysis using evolution algorithm approach. *11th WSEAS Intl. Conf. on Information Security and Privacy (ISP'12)*. DETECT, GLYPH, ML
- Din, R., Samsudin, A., & Lertkrai, P. (2012). A Framework Components for Natural Language Steganalysis. *Intl. Journal of Computer Theory and Engineering*, 4(4), 641. DETECT, SURV
- Dulera, S., Jinwala, D., & Dasgupta, A. (2012). Experimenting with the novel approaches in text steganography. *Intl. Journal of Network Security & Its Applications (IJNSA)*, 3(6), 213-225. CODE, GLYPH, REPL, GEN,
- Fu, Z., Sun, X., Liu, Y., & Li, B. (2012). Text split-based steganography in OOXML format documents for covert communication. *Security and Communication Networks*, 5(9), 957-968. CODE, FORM
- Gardiner, J. (2012) *StegChat: A Synonym-Substitution Based Algorithm for Text Steganography*. Msc Thesis, University of Birmingham. CODE, WORD, REPL, SEM

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## **Annotation Key**

### ***Application of steganography***

- CODE -- encoding message by sender, decoding message by receiver
- DETECT -- detecting steganography in a document (steganalysis)
- WATER -- watermarking -- encoding and decoding message by same party

### ***Level at which the operations are performed:***

- FORM -- formatting, SYMB -- symbol, WORD -- word
- PHR -- phrase, SENT -- sentence, ERR -- errors

### ***Operation performed by algorithm:***

- INS -- insert
- DEL -- delete
- REPL -- replace
- PERM -- permute

### ***Linguistics area:***

- PHON -- sound (phonetics)
- GLYPH -- writing
- SPELL -- spelling
- SYNT -- syntax
- SEM -- meaning (semantics)

### ***Methodology:***

- TRANS -- translation from one language to another
- SUM -- summarization

- GEN -- text generation from templates or calculations
- NUM -- numeric computations from
- STAT -- statistical analysis
- ML -- machine learning

***Miscellany:***

- SURV -- literature survey
- REV -- revision of previous paper
- LANG -- language dependent, with languages specified
- DOM -- document or application domain specific
- MULTI -- multiple techniques used
- CRYPT -- encryption techniques used

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