

Research Log

Niall Lyons

August 31, 2020

1 Refernces In Final Paper

References

- [1] Y. Mostofi and D. C. Cox, "Robust timing synchronization design in OFDM systems - Part II: high-mobility cases," in *IEEE Transactions on Wireless Communications*, vol. 6, no. 12, pp. 4340-4348, December 2007, doi: 10.1109/TWC.2007.05901.
- [2] M. Chiani and M. G. Martini, "Practical frame synchronization for data with unknown distribution on AWGN channels," in *IEEE Communications Letters*, vol. 9, no. 5, pp. 456-458, May 2005, doi: 10.1109/LCOMM.2005.1431170.
- [3] Y. Mostofi and D. C. Cox, "A robust timing synchronization design in OFDM systems-part I: low-mobility cases," in *IEEE Transactions on Wireless Communications*, vol. 6, no. 12, pp. 4329-4339, December 2007, doi: 10.1109/TWC.2007.05900.
- [4] IEEE Standard for Information technology– Local and metropolitan area networks– Specific requirements– Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Further Higher Data Rate Extension in the 2.4 GHz Band," in *IEEE Std 802.11g-2003 (Amendment to IEEE Std 802.11, 1999 Edn. (Reaff 2003) as amended by IEEE Stds 802.11a-1999, 802.11b-1999, 802.11b-1999/Cor 1-2001, and 802.11d-2001)* , vol., no., pp.1-104, 27 June 2003, doi: 10.1109/IEEESTD.2003.94282.
- [5] "Model Complexity - an overview — ScienceDirect Topics", Sciencedirect.com, 2020. [Online]. Available: <https://www.sciencedirect.com/topics/computer-science/model-complexity>. [Accessed: 27- Aug- 2020].
- [6] J. Park, M. Kim, D. Hwang and J. Han, "Analysis on Preamble Detection and False Alarm Probabilities of ICPC Method," 2015 IEEE 82nd Vehicular Technology Conference (VTC2015-Fall), Boston, MA, 2015, pp. 1-5, doi: 10.1109/VTCFall.2015.7390844.

- [7] S. Kim, K. Joo and Y. Lim, "A delay-robust random access preamble detection algorithm for LTE system," 2012 IEEE Radio and Wireless Symposium, Santa Clara, CA, 2012, pp. 75-78, doi: 10.1109/RWS.2012.6175341.
- [8] W. Chen, X. Wen, L. Yang, W. Li and T. A. Gulliver, "Dynamic preamble scheduling and detection for cooperative relay networks," Proceedings of 2011 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing, Victoria, BC, 2011, pp. 131-134, doi: 10.1109/PACRIM.2011.6032880.
- [9] S. Nagaraj, S. Khan, C. Schlegel, and M. Burnashev, "On preamble detection in packet-based wireless networks," in IEEE International Symposium on Spread Spectrum Techniques and Applications, 2006, pp. 476-480, doi: 10.1109/ISSSTA.2006.311817.
- [10] N. Farsad and A. Goldsmith, "Neural Network Detection of Data Sequences in Communication Systems."
- [11] R. Pascanu, C. Gulcehre, K. Cho, and Y. Bengio, "How to Construct Deep Recurrent Neural Networks."
- [12] S. Squartini, A. Hussain, and F. Piazza, "Preprocessing based solution for the vanishing gradient problem in recurrent neural networks," in Proceedings - IEEE International Symposium on Circuits and Systems, 2003, vol. 5, doi: 10.1109/iscas.2003.1206412
- [13] S. Hochreiter and J. Schmidhuber, "Long Short-Term Memory," Neural Comput., vol. 9, no. 8, pp. 1735-1780, Nov. 1997, doi: 10.1162/neco.1997.9.8.1735
- [14] S. Hochreiter and J. Schmidhuber, "Long Short-Term Memory," Neural Comput., vol. 9, no. 8, pp. 1735-1780, Nov. 1997, doi: 10.1162/neco.1997.9.8.1735.
- [15] A. Graves, N. Beringer, and J. Schmidhuber, "Rapid Retraining on Speech Data with LSTM Recurrent Networks Istituto Dalle Molle di studi sull'intelligenza artificiale Galleria 2 CH-6900 Manno, Switzerland Rapid Retraining on Speech Data with LSTM Recurrent Networks," 2005
- [16] Y. Lu, Y. Shi, and J. Yang, "A new method for semantic consistency verification of aviation radiotelephony communication based on LSTMRNN," in International Conference on Digital Signal Processing, DSP, Jul. 2016, vol. 0, pp. 422-426, doi:10.1109/ICDSP.2016.7868592.
- [17] A. Graves and J. Schmidhuber, "Framewise Phoneme Classification with Bidirectional LSTM Networks."
- [18] F. Belabed and R. Bouallegue, "A comparative Analysis of Machine Learning Classification Approaches for Fountain Data Estimation in Wireless Sensor Networks," 2019 15th International Wireless Communications & Mobile

Computing Conference (IWCMC), Tangier, Morocco, 2019, pp. 1251-1254, doi: 10.1109/IWCMC.2019.8766690.

- [19] H. Huang et al., "Deep Learning for Physical-Layer 5G Wireless Techniques: Opportunities, Challenges and Solutions," in IEEE Wireless Communications, vol. 27, no. 1, pp. 214-222, February 2020, doi: 10.1109/MWC.2019.1900027.
- [20] F. Belabed and R. Bouallegue, "A comparative Analysis of Machine Learning Classification Approaches for Fountain Data Estimation in Wireless Sensor Networks," 2019 15th International Wireless Communications & Mobile Computing Conference (IWCMC), Tangier, Morocco, 2019, pp. 1251-1254, doi: 10.1109/IWCMC.2019.8766690.
- [21] H. Huang et al., "Deep Learning for Physical-Layer 5G Wireless Techniques: Opportunities, Challenges and Solutions," in IEEE Wireless Communications, vol. 27, no. 1, pp. 214-222, February 2020, doi: 10.1109/MWC.2019.1900027.
- [22] H. Sun, A. O. Kaya, M. Macdonald, H. Viswanathan and M. Hong, "Deep Learning Based Preamble Detection and TOA Estimation," 2019 IEEE Global Communications Conference (GLOBECOM), Waikoloa, HI, USA, 2019, pp. 1-6, doi: 10.1109/GLOBECOM38437.2019.9013265.
- [23] H. Apaydin, H. Feizi, M. T. Sattari, M. S. Colak, S. Shamshirband, and K.-W. Chau, "Comparative Analysis of Recurrent Neural Network Architectures for Reservoir Inflow Forecasting," Water, vol. 12, no. 5, p. 1500, May 2020.
- [24] [3]Web.stanford.edu, 2020. [Online]. Available: <https://web.stanford.edu/lmackey/stats300a/doc/stats300a-fall15-lecture13.pdf>. [Accessed: 27- Aug- 2020].
- [25] "Receiver-Operating Characteristic Analysis for Evaluating Diagnostic Tests and Predictive Models," Circulation, 06-Feb-2007. [Online]. Available: <https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.105.594929>. [Accessed: 27-Aug-2020].

2 References Not In Final Paper

References

- [1] S. Hassan, A. Irfan, A. Mirza and I. Siddiqi, "Cursive Handwritten Text Recognition using Bi-Directional LSTMs: A Case Study on Urdu Handwriting," 2019 International Conference on Deep Learning and Machine Learning in Emerging Applications (Deep-ML), Istanbul, Turkey, 2019, pp. 67-72, doi: 10.1109/Deep-ML.2019.00021.

- [2] X. Li, Y. He, Y. Yang, Y. Hong and X. Jing, "LSTM based Human Activity Classification on Radar Range Profile," 2019 IEEE International Conference on Computational Electromagnetics (ICCEM), Shanghai, China, 2019, pp. 1-2, doi: 10.1109/COMPEM.2019.8779144.
- [3] M. Roopak, G. Yun Tian and J. Chambers, "Deep Learning Models for Cyber Security in IoT Networks," 2019 IEEE 9th Annual Computing and Communication Workshop and Conference (CCWC), Las Vegas, NV, USA, 2019, pp. 0452-0457, doi: 10.1109/CCWC.2019.8666588.
- [4] W. Chen, J. Sun and C. Gao, "Improving Residue-Residue Contacts Prediction from Protein Sequences Using RNN-Based LSTM Network," 2019 International Conference on Machine Learning and Cybernetics (ICMLC), Kobe, Japan, 2019, pp. 1-7, doi: 10.1109/ICMLC48188.2019.8949207.
- [5] X. Liu, C. Gong and Z. Xu, "Sequential detection for optical wireless scattering communication," in IEEE/OSA Journal of Optical Communications and Networking, vol. 9, no. 9, pp. D86-D95, Sept. 2017, doi: 10.1364/JOCN.9.000D86.
- [6] Y. Li, H. Yin, X. Ji and B. Wu, "Design And Implementation Of Underwater Wireless Optical Communication System With High-Speed And Full-Duplex Using Blue/Green Light," 2018 10th International Conference on Communication Software and Networks (ICCSN), Chengdu, 2018, pp. 99-103, doi: 10.1109/ICCSN.2018.8488232.
- [7] H. Zheng, F. Lin, X. Feng and Y. Chen, "A Hybrid Deep Learning Model With Attention-Based Conv-LSTM Networks for Short-Term Traffic Flow Prediction," in IEEE Transactions on Intelligent Transportation Systems, doi: 10.1109/TITS.2020.2997352.