# Bibliography

[1] H. Fourati, R. Maaloul, and L. Chaari, "A survey of 5g network systems: challenges and machine learning approaches," *International Journal of Machine Learning and Cybernetics*, vol. 12, no. 2, pp. 385–431, 2021.

[2] I. Budhiraja, N. Kumar, and S. Tyagi, "Deep-reinforcement-learning-based proportional fair scheduling control scheme for underlay d2d communication," *IEEE Internet of Things Journal*, vol. 8, no. 5, pp. 3143–3156, 2020.

[3] F. Jameel, Z. Hamid, F. Jabeen, S. Zeadally, and M. A. Javed, "A survey of device-to-device communications: Research issues and challenges," *IEEE Communications Surveys & Tutorials*, vol. 20, no. 3, pp. 2133–2168, 2018.

[4] J. Chen, J. Jia, Y. Liu, X. Wang, and A. H. Aghvami, "Optimal resource block assignment and power allocation for d2d-enabled noma communication," *IEEE Access*, vol. 7, pp. 90023–90035, 2019.

[5] W. Lee, M. Kim, and D.-H. Cho, "Deep learning based transmit power control in underlaid device-to-device communication," *IEEE Systems Journal*, vol. 13, no. 3, pp. 2551–2554, 2018.

[6] W. Lee and R. Schober, "Deep learning-based resource allocation for device-to-device communication," *arXiv preprint arXiv:2011.12757*, 2020.

[7] F. Hussain, S. A. Hassan, R. Hussain, and E. Hossain, "Machine learning for resource management in cellular and iot networks: Potentials, current solutions, and open challenges," *IEEE Communications Surveys & Tutorials*, vol. 22, no. 2, pp. 1251–1275, 2020.

[8] C. Dewi, R.-C. Chen, and S.-K. Tai, "Evaluation of robust spatial pyramid pooling based on convolutional neural network for traffic sign recognition system," *Electronics*, vol. 9, no. 6, p. 889, 2020.

[9] A. Khan, A. Sohail, U. Zahoora, and A. S. Qureshi, "A survey of the recent architectures of deep convolutional neural networks," *Artificial intelligence review*, vol. 53, no. 8, pp. 5455–5516, 2020.

[10] F. Hussain, M. Y. Hassan, M. S. Hossen, and S. Choudhury, "An optimal resource allocation algorithm for d2d communication underlaying cellular networks," in *2017 14th IEEE Annual Consumer Communications & Networking Conference (CCNC)*, pp. 867–872, IEEE, 2017.

[11] Y. Zhang, F. Li, M. A. A. Al-Qaness, and X. Luan, "A resource allocation scheme for multi-d2d communications underlying cellular networks with multi-subcarrier reusing," *Applied Sciences*, vol. 7, no. 2, p. 148, 2017.

[12] Y. Luo, P. Hong, and R. Su, "Energy-efficient scheduling and power allocation for energy harvesting-based d2d communication," in *GLOBECOM 2017-2017 IEEE Global Communications Conference*, pp. 1–6, IEEE, 2017.

[13] Z. Kuang, G. Liu, G. Li, and X. Deng, "Energy efficient resource allocation algorithm in energy harvesting-based d2d heterogeneous networks," *IEEE Internet of Things Journal*, vol. 6, no. 1, pp. 557–567, 2018.

[14] S. Saypadith and S. Aramvith, "Real-time multiple face recognition using deep learning on embedded gpu system," in *2018 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC)*, pp. 1318–1324, IEEE, 2018.

[15] A. Kamilaris and F. X. Prenafeta-Boldú, "Deep learning in agriculture: A survey," *Computers and electronics in agriculture*, vol. 147, pp. 70–90, 2018.

[16] A. Esteva, A. Robicquet, B. Ramsundar, V. Kuleshov, M. DePristo, K. Chou, C. Cui, G. Corrado, S. Thrun, and J. Dean, "A guide to deep learning in healthcare," *Nature medicine*, vol. 25, no. 1, pp. 24–29, 2019.

[17] C. Zhang, P. Patras, and H. Haddadi, "Deep learning in mobile and wireless networking: A survey," *IEEE Communications surveys & tutorials*, vol. 21, no. 3, pp. 2224–2287, 2019.

[18] W. Lee, O. Jo, and M. Kim, "Intelligent resource allocation in wireless communications systems," *IEEE Communications Magazine*, vol. 58, no. 1, pp. 100–105, 2020.

[19] R. Zhang and J. Cui, "Application of convolutional neural network in multi-channel scenario d2d communication transmitting power control," in *2020 International Conference on Computer Vision, Image and Deep Learning (CVIDL)*, pp. 668–672, IEEE, 2020.

[20] Y. S. Tan, K. M. Lim, C. Tee, C. P. Lee, and C. Y. Low, "Convolutional neural network with spatial pyramid pooling for hand gesture recognition," *Neural Computing and Applications*, vol. 33, no. 10, pp. 5339–5351, 2021.

[21] S. Boyd, S.-J. Kim, L. Vandenberghe, and A. Hassibi, "A tutorial on geometric programming," *Optimization and engineering*, vol. 8, no. 1, pp. 67–127, 2007.

[22] S. Boyd, S. P. Boyd, and L. Vandenberghe, *Convex optimization*. Cambridge university press, 2004.

[23] P. Kim, "Convolutional neural network," in *MATLAB deep learning*, pp. 121–147, Springer, 2017.

[24] K. He, X. Zhang, S. Ren, and J. Sun, "Spatial pyramid pooling in deep convolutional networks for visual recognition," *IEEE transactions on pattern analysis and machine intelligence*, vol. 37, no. 9, pp. 1904–1916, 2015.

[25] X. Zou, Z. Wang, Q. Li, and W. Sheng, "Integration of residual network and convolutional neural network along with various activation functions and global pooling for time series classification," *Neurocomputing*, vol. 367, pp. 39–45, 2019.

[26] K. He and J. Sun, "Convolutional neural networks at constrained time cost," in *Proceedings of the IEEE conference on computer vision and pattern recognition*, pp. 5353–5360, 2015.

[27] S. M. Shahid, S. Ko, and S. Kwon, "Real-time abnormality detection and classification in diesel engine operations with convolutional neural network," *Expert Systems with Applications*, vol. 192, p. 116233, 2022.

[28] D. Uwakwe and A. Ajani, "The evaluation of the impact of inter-cell interference coordination on the performance of users in an lte system," 05 2018.

[29] L. Yuxiang, "Cnn-based resource allocation for energy-efficient d2d communications," 2020.

[30] W. Dinkelbach, "On nonlinear fractional programming," *Management science*, vol. 13, no. 7, pp. 492–498, 1967.

[31] R. Ota, J. Pati, and A. Ojha, "Geometric programming technique to optimize power distribution system," *OPSEARCH*, vol. 56, no. 1, pp. 282–299, 2019.

[32] G. B. Thomas and R. L. Finney, *Calculus*. Addison-Wesley Publishing Company, 1961.