

REFERENCES

- [1] Luo, J., Li, Z., Wang, J., Lin, C.-Y., 2021. ChartOCR: Data Extraction from Charts Images via a Deep Hybrid Framework, in: 2021 IEEE Winter Conference on Applications of Computer Vision (WACV). Presented at the 2021 IEEE Winter Conference on Applications of Computer Vision (WACV), IEEE, Waikoloa, HI, USA, pp. 1916–1924. <https://doi.org/10.1109/WACV48630.2021.00196>
- [2] Jung, D., Kim, W., Song, H., Hwang, J., Lee, B., Kim, B., Seo, J., 2017. ChartSense: Interactive Data Extraction from Chart Images, in: Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems.
- [3] Bajić, F., Job, J., 2022. Data Extraction of Circular-Shaped and Grid-like Chart Images. *J. Imaging* 8, 136. <https://doi.org/10.3390/jimaging8050136>
- [4] Mishra, P., Kumar, S., Chaube, M.K., 2021. ChartFuse: a novel fusion method for chart classification using heterogeneous microstructures. *Multimed Tools Appl* 80, 10417–10439. <https://doi.org/10.1007/s11042-020-10186-z>
- [5] Al-Zaidy, R.A., Giles, C.L., 2015. Automatic Extraction of Data from Bar Charts, in: Proceedings of the 8th International Conference on Knowledge Capture. Presented at the K-CAP 2015: Knowledge Capture Conference, ACM, Palisades NY USA, pp. 1–4. <https://doi.org/10.1145/2815833.2816956>
- [6] Dadhich, K., Daggubati, S., Sreevalsan-Nair, J., 2021. BarChartAnalyzer: Digitizing Images of Bar Charts, in: Proceedings of the International Conference on Image Processing and Vision Engineering. Presented at the International Conference on Image Processing and Vision Engineering, SCITEPRESS - Science and Technology Publications, Online Streaming, --- Select a Country ---, pp. 17–28. <https://doi.org/10.5220/0010408300170028>
- [7] Decatur, D., Krishnan, S., 2021. VizExtract: Automatic Relation Extraction from Data Visualizations.
- [8] Dyomin, V.V., Kamenev, D.V., 2016. Evaluation of Algorithms for Automatic Data Extraction from Digital Holographic Images of Particles. *Russ Phys J* 58, 1467–1474. <https://doi.org/10.1007/s11182-016-0669-z>
- [9] Gao, J., Zhou, Y., Barner, K.E., 2012. View: Visual Information Extraction Widget for improving chart images accessibility, in: 2012 19th IEEE International Conference on Image Processing. Presented at the 2012 19th IEEE International Conference on Image Processing (ICIP 2012), IEEE, Orlando, FL, USA, pp. 2865–2868. <https://doi.org/10.1109/ICIP.2012.6467497>
- [10] Al-Zaidy, R.A., Choudhury, S.R., Giles, C.L., n.d. Automatic Summary Generation for Scientific Data Charts 6.

- [11] Presented at the CHI '17: CHI Conference on Human Factors in Computing Systems, ACM, Denver Colorado USA, pp. 6706–6717. <https://doi.org/10.1145/3025453.3025957>
- [12] Kafle, K., Price, B., Cohen, S., Kanan, C., 2018. DVQA: Understanding Data Visualizations via Question Answering, in: 2018 IEEE/CVF Conference on Computer Vision and Pattern Recognition. Presented at the 2018 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), IEEE, Salt Lake City, UT, pp. 5648–5656. <https://doi.org/10.1109/CVPR.2018.00592>
- [13] Kantharaj, S., Leong, R.T., Lin, X., Masry, A., Thakkar, M., Hoque, E., Joty, S., 2022. Chart-to-Text: A Large-Scale Benchmark for Chart Summarization, in: Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers). Presented at the Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), Association for Computational Linguistics, Dublin, Ireland, pp. 4005–4023. <https://doi.org/10.18653/v1/2022.acl-long.277>
- [14] Kim, D.H., Hoque, E., Agrawala, M., 2020. Answering Questions about Charts and Generating Visual Explanations, in: Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems. Presented at the CHI '20: CHI Conference on Human Factors in Computing Systems, ACM, Honolulu HI USA, pp. 1–13. <https://doi.org/10.1145/3313831.3376467>
- [15] Liu, X., Klabjan, D., NBless, P., 2019. Data Extraction from Charts via Single Deep Neural Network.
- [16] Dyomin, V.V., Kamenev, D.V., 2016. Evaluation of Algorithms for Automatic Data Extraction from Digital Holographic Images of Particles. *Russ Phys J* 58, 1467–1474. <https://doi.org/10.1007/s11182-016-0669-z>
- [17] Masry, A., Long, D., Tan, J.Q., Joty, S., Hoque, E., 2022. ChartQA: A Benchmark for Question Answering about Charts with Visual and Logical Reasoning, in: Findings of the Association for Computational Linguistics: ACL 2022. Presented at the Findings of the Association for Computational Linguistics: ACL 2022, Association for Computational Linguistics, Dublin, Ireland, pp. 2263–2279. <https://doi.org/10.18653/v1/2022.findings-acl.177>
- [18] Masry, A., Prince, E.H., n.d. Integrating Image Data Extraction and Table Parsing Methods for Chart Question answering 5.
- [19] Methani, N., Ganguly, P., Khapra, M.M., Kumar, P., 2020. PlotQA: Reasoning over Scientific Plots, in: 2020 IEEE Winter Conference on Applications of Computer Vision (WACV). Presented at the 2020 IEEE Winter Conference on Applications of Computer Vision (WACV), IEEE, Snowmass Village, CO, USA, pp. 1516–1525. <https://doi.org/10.1109/WACV45572.2020.9093523>
- [20] Mishchenko, A., Vassilieva, N., 2011. Model-Based Chart Image Classification, in: Bebis, G., Boyle, R., Parvin, B., Koracin, D., Wang, S., Kyungnam, K., Benes, B., Moreland, K., Borst, C., DiVerdi, S., Yi-Jen, C., Ming, J. (Eds.), *Advances in Visual Computing, Lecture Notes in Computer Science*. Springer Berlin Heidelberg, Berlin, Heidelberg, pp. 476–485. https://doi.org/10.1007/978-3-642-24031-7_48
- [21] Araújo, T., Chagas, P., Alves, J., Santos, C., Sousa Santos, B., Serique Meiguins, B., 2020. A Real-World Approach on the Problem of Chart Recognition

Using Classification, Detection and Perspective Correction. *Sensors* 20, 4370. <https://doi.org/10.3390/s20164370>

[22] Mishra, P., Kumar, S., Chaube, M.K., Shrawankar, U., 2022. ChartVi: Charts summarizer for visually impaired. *Journal of Computer Languages* 69, 101107. <https://doi.org/10.1016/j.cola.2022.101107>

[23] Oyama, S., Baba, Y., Ohmukai, I., Dokoshi, H., Kashima, H., 2016. Crowdsourcing chart digitizer: task design and quality control for making legacy open data machine-readable. *Int J Data Sci Anal* 2, 45–60. <https://doi.org/10.1007/s41060-016-0025-y>

[24] Paliwal, S.S., D, V., Rahul, R., Sharma, M., Vig, L., 2019. TableNet: Deep Learning Model for End-to-end Table Detection and Tabular Data Extraction from Scanned Document Images, in: 2019 International Conference on Document Analysis and Recognition (ICDAR). Presented at the 2019 International Conference on Document Analysis and Recognition (ICDAR), IEEE, Sydney, Australia, pp. 128–133. <https://doi.org/10.1109/ICDAR.2019.00029>

[25] Saket, B., Endert, A., Demiralp, C., 2019. Task-Based Effectiveness of Basic Visualizations. *IEEE Trans. Visual. Comput. Graphics* 25, 2505–2512. <https://doi.org/10.1109/TVCG.2018.2829750>