REFERENCES & DATASETS

INTRO (2020) - A STUDY ON VISUAL PERCEPTION OF LIGHT FIELD CONTENT

1. Gill, E. Zerman, C. Ozcinar, A. Smolic. “A Study on Visual Perception of Light Field Content” The Irish Machine Vision and Image Processing Conference (IMVIP), 2020.

Gill, Ailbhe, et al. "A study on visual perception of light field content." *arXiv preprint arXiv:2008.03195* (2020).
APA
ISO 690

DATASET:

https://v-sense.scss.tcd.ie/research/light-fields/visual-attention-for-light-fields/

The Light Field Visual Attention Dataset can be downloaded here [**Please contact the authors**].

Dataset from 4 databases:

- http://lightfield.stanford.edu/lfs.html
- https://www.epfl.ch/labs/mmspg/downloads/epfl-light-field-image-dataset/
- DISNEY (no authentication)
- https://lightfield-analysis.uni-konstanz.de/

NOT available
WAITING FOR REPLY

2014 - SALIENCY DETECTION ON LIGHT FIELD

1. Li, J. Ye, Y. Ji, H. Ling and J. Yu, "Saliency Detection on Light Field," *2014 IEEE Conference on Computer Vision and Pattern Recognition*, Columbus, OH, USA, 2014, pp. 2806-2813, doi: 10.1109/CVPR.2014.359.keywords: {Cameras;Image color analysis;Image resolution;Robustness;Image edge detection;Harmonic analysis},

!!!! https://www.eecis.udel.edu/~nianyi/ ← FOR 2014 AND WSC!

https://www.eecis.udel.edu/~nianyi/LFSD.htm

DATASET & CODE:

https://github.com/behnam/python-lfp-reader

AVAILABLE
same github as 2015

2015-WSC

N. Li, Bilin Sun and J. Yu, "A weighted sparse coding framework for saliency detection,"

2015 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)

, Boston, MA, USA, 2015, pp. 5216-5223, doi: 10.1109/CVPR.2015.7299158.

keywords: {Dictionaries;Image color analysis;Three-dimensional displays;Feature extraction;Databases;Histograms;Image reconstruction},

https://www.researchgate.net/publication/294784059_A_Weighted_Sparse_Coding_Framework_for_Saliency_Detection

same dataset as 2014
code AVAILABLE

2015-STUDY ON VISUAL PERCEPTION OF LF CONTENT

Zhang, J., Wang, M., Gao, J., Wang, Y., Zhang, X., & Wu, X. (2015). Saliency detection with a deeper investigation of light field. *International Conference on Artificial Intelligence*, 2212–2218. https://ijcai.org/Abstract/15/313

DATASET:

https://paperswithcode.com/dataset/lfsd

https://www.eecis.udel.edu/~nianyi/LFSD.htm

same dataset as 2014 (LFSD)
all the github AVAILABLE

2017 - SALIENCY DETECTION ON LF

Zhang, Jun, et al. "Saliency detection on light field: A multi-cue approach." *ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)* 13.3 (2017): 1-22.
APA
ISO 690

DATASET **HFUT**:

https://github.com/pencilzhang/HFUT-Lytro-dataset/tree/master

Please contact zhangjun1126@gmail.com for dataset usage !!

NOT AVAILABLE

NO code
waiting for reply

2018 – PDNet

Zhu, Chunbiao, et al. "PDNet: Prior-model guided depth-enhanced network for salient object detection." *2019 IEEE International conference on multimedia and expo (ICME)*. IEEE, 2019.
APA
ISO 690

DATASET & CODE:

https://github.com/ChunbiaoZhu/PDNet/

https://pan.baidu.com/s/1fIL4T0ZF2V1RAikr0mmpmg#list/path=%2FPDNET_datasets

dataset is in baidu (chinese drive)
all github AVAILABLE
waiting for reply

2019 - AFNet

Wang, Ningning, and Xiaojin Gong. "Adaptive fusion for RGB-D salient object detection." *IEEE access* 7 (2019): 55277-55284.
APA
ISO 690

https://github.com/LuciaNingning/Adaptive_Fusion_RGBD_Saliency_Detection?tab=readme-ov-file

> https://github.com/Lucia-Ningning/Adaptive_Fusion_RGBD_Saliency_Detection

MAYBE CODE 

waiting for reply

2019 - DEEP LEARNING FOR LF SALIENCY DETECTION

1. Wang, Y. Piao, H. Lu, X. Li and L. Zhang, "Deep Learning for Light Field Saliency Detection," *2019 IEEE/CVF International Conference on Computer Vision (ICCV)*, Seoul, Korea (South), 2019, pp. 8837-8847, doi: 10.1109/ICCV.2019.00893.keywords: {Saliency detection;Streaming media;Two dimensional displays;Three-dimensional displays;Image segmentation;Feature extraction;Image color analysis},

DATASET:

https://github.com/DUT-IIAU-OIP-Lab/ICCV2019_Deeplightfield_Saliency

Baidu

2019 - DEEP LF-DRIVEN SALIENCY DETECTION FROM A SINGLE VIEW

Piao, Yongri, et al. "Deep Light-field-driven Saliency Detection from a Single View." *IJCAI*. 2019.
APA
ISO 690

DATASET:

https://github.com/TiantianWang/ICCV2019_Deeplightfield_Saliency/blob/master/README.md

same dataset as before

2020 - Light Field Saliency Detection With Deep Convolutional Networks

1. Zhang, Y. Liu, S. Zhang, R. Poppe and M. Wang, "Light Field Saliency Detection With Deep Convolutional Networks," in *IEEE Transactions on Image Processing*, vol. 29, pp. 4421-4434, 2020, doi: 10.1109/TIP.2020.2970529. keywords: {Saliency detection;Cameras;Deep learning;Light fields;Two dimensional displays;Image color analysis;Saliency detection;light field;micro-lens images;angular changes;deep neural network},

DATASET:

https://github.com/pencilzhang/MAC-light-field-saliency-net

chinese drive
maybe found code

2022 - EXPLORING SPATIAL CORRELATION FOR LF SALIENCY DETECTION: EXPANSION FROM A SINGLE VIEW

Zhang M, Xu S, Piao Y, Lu H. Exploring Spatial Correlation for Light Field Saliency Detection: Expansion From a Single View. IEEE Trans Image Process. 2022;31:6152-6163. doi: 10.1109/TIP.2022.3205749. Epub 2022 Sep 22. PMID: 36112561.

DATASET:

https://github.com/DUT-IIAU-OIP-Lab/DUTLF-V2

AVAILABLE dataset
NO code

2023 - A Thorough Benchmark and a New Model for Light Field Saliency Detection

1. Gao, S. Fan, G. Li and W. Lin, "A Thorough Benchmark and a New Model for Light Field Saliency Detection," in *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 45, no. 7, pp. 8003-8019, 1 July 2023, doi: 10.1109/TPAMI.2023.3235415. keywords: {Light fields;Annotations;Three-dimensional displays;Saliency detection;Feature extraction;Task analysis;Cameras;Benchmark;focal stack;light field;salient object detection},

DATASET:

https://openi.pcl.ac.cn/OpenDatasets/PKU-LF

chinese drive
NO code

AVAILABLE CODES:

- **2015**
- **2020**
- **2015-wsc**