

YIZHI WANG

Beijing, China, 100871

Homepage: <https://yizhiwang96.github.io/>

Email: wangyizhi@pku.edu.cn Phone: +86-13120338379

EDUCATION

Peking University, China

Ph.D. in Computer Science, Advisor: Prof. Zhouhui Lian

Sep. 2017 - Jul. 2022 (expected)

Peking University, China

Bachelor in Computer Science

Sep. 2013 - Jul. 2017

RESEARCH INTERESTS

Image/Graphics Generation, Pattern Recognition, Font Generation, OCR, Layout Generation

PUBLICATIONS

Yizhi Wang, Guo Pu, Wenhan Luo, Yexin Wang, Pengfei Xiong, Hongwen Kang, Zhouhui Lian. Aesthetic Text Logo Synthesis via Content-aware Layout Inferring. CVPR. 2022.

Yizhi Wang, Zhouhui Lian. DeepVecFont: Synthesizing High-quality Vector Fonts via Dual-modality Learning. ACM Transactions on Graphics (SIGGRAPH Asia 2021 Technical Paper). 2021.

Yizhi Wang*, Yue Gao*, Zhouhui Lian. Attribute2Font: Creating Fonts You Want From Attributes. ACM Transactions on Graphics (SIGGRAPH 2020 Technical Paper, * denotes equal contribution). 2020.

Yizhi Wang, Zhouhui Lian. Exploring Font-independent Features for Scene Text Recognition. ACM Multimedia. 2020.

Yizhi Wang, Zhouhui Lian, Yingmin Tang, Jianguo Xiao. Boosting Scene Character Recognition by Learning Canonical Forms of Glyphs. International Journal on Document Analysis and Recognition. 2019.

Yizhi Wang, Zhouhui Lian, Yingmin Tang, Jianguo Xiao. Font Recognition in Natural Images via Transfer Learning. International Conference on Multimedia Modeling. 2018.

Jie Chen, Zhouhui Lian, **Yizhi Wang**, Yingmin Tang, Jianguo Xiao. Irregular Scene Text Detection via Attention Guided Border Labeling. Science China Information Sciences. 2019.

RESEARCH EXPERIENCE

Font Generation and Glyph Image Synthesis

Sep. 2019 - Present

WICT, Peking University

Advisor: Prof. Zhouhui Lian

- Proposing a novel generative model which takes the font attributes as input and synthesizes the corresponding glyph images.
- Proposing a novel method, DeepVecFont, to directly generate vector fonts by exhaustively exploiting the dual-modality information (i.e., raster images and vector outlines).

Automatic Layout Generation for Posters

Jun. 2021 - Present

Tencent

Advisor: Dr. Wenhan Luo

- Proposing a GAN-based method which learns from the human-designed posters and generates layouts for new content automatically. It will be applied into the automatic poster/cover production for Tencent Video.

Scene Text (Character) Recognition

Jul. 2019 - Jul. 2020

WICT, Peking University

Advisor: Prof. Zhouhui Lian

- Addressing the challenge of font variance in scene text recognition (STR) and proposing a font-independent feature representation method to increase the robustness of STR models.

Font Recognition

Jul. 2017 - Jan. 2018

WICT, Peking University

Advisor: Prof. Zhouhui Lian

- Proposing a novel image composition method and a transfer learning scheme for font recognition in the wild.

Scene Text Detection

Oct. 2017 - Jan. 2018

WICT, Peking University

Advisor: Prof. Zhouhui Lian

- Proposing a novel border-labeling method to segment closely located text instances more precisely.

HONORS AND AWARDS

Merit Student (top 10%), Peking University	2018, 2021
Excellent Student (top 5%), Wangxuan Institute of Peking University	2020, 2021
CETC The 14TH Research Institute Glarun Scholarship (top 10%), Peking University	2018
Excellent Award (top 5%), The 17th Programming Contest of Peking University	2018
Outstanding Undergraduate Dissertation of Peking University	2017

PATENTS

Chinese font recognition in the wild using a deep neural network
CN Patent App 201810104830.7 (granted)

Text recognition by learning canonical forms of glyphs
CN Patent App 201910716704.1

Vector font synthesis via dual-modality learning
CN Patent App 202111555201.4

PEER-REVIEWS

Conferences: ICCV 2021, AAAI 2022, CVPR 2022, ECCV 2022
Journal: Expert Systems With Applications

TECHNICAL SKILLS

Programming: C/C++, Python, Matlab
Deep Learning Framework: PyTorch, Tensorflow
Tools: Adobe Photoshop/Premiere/Illustrator

TEACHING EXPERIENCE

Elementary Number Theory	Spring, 2018
Teaching Assistant	EECS, Peking University
Intelligent Optimization Methods	Fall, 2019
Teaching Assistant	EECS, Peking University

REFERENCES

Zhouhui Lian

Associate Professor, Wangxuan Institute of Computer Technology, Peking University
lianzhouhui@pku.edu.cn

Jianguo Xiao

Professor, Wangxuan Institute of Computer Technology, Peking University
xjg@pku.edu.cn

Wenhan Luo

Research Scientist, Tencent AI Lab
whluo.china@gmail.com