
Wenjie Pei

Shenzhen, China

Phone: +86 13662205038

Email: wenjecoder@outlook.com

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

Experience

- July 2018 – Present, Youtu X-Lab, Tencent
Senior Researcher
Working on face recognition, video captioning, sequence modeling, etc.
 - 07/2016 – 12/2016 Carnegie Mellon University (**CMU**)
Visiting Scholar in Language Technology Institute (LTI).
Supervisors: Prof. Louis-Philippe Morency and Dr. Tadas Baltrušaitis.
 - 03/2013 – 08/2013 Philips Research Eindhoven
Research Internship.
-

Educational Background

- 10/2013 – 06/2018 Delft University of Technology (**TU Delft**)
PhD in Pattern Recognition and Computer Vision Laboratory.
Co-Supervisors: Dr. David Tax (TU Delft) and Laurens van der Maaten (Facebook AI Research)
Research Area: Machine Learning, Computer Vision
 - 09/2011 – 08/2013 Eindhoven University of Technology (**TU/e**)
Master of computer Science and Engineering (Ranked among top positions)
Supervisor: Dr. Toon Calders
Research Area: Data Mining
 - 09/2008 – 06/2011 Zhejiang University (**ZJU**)
Master of Computer Science and technology in State Key Lab of CAD&CG
Co-Supervisors: Dr. Hujun Bao and Dr. Jin Huang
Research topic: Consistent Visualization for Surface Vector Fields
 - 09/2004 – 06/2008 Shanghai JiaoTong University (**SJTU**)
Bachelor's degree of Computer Science & Engineering Ranked top 15%
Bachelor's degree of Business Management
-

Research Interests

- Sequence (including time series) modeling
 - Video / Image captioning
 - Attention Model
 - Image hashing
 - Recurrent Neural Networks
 - Face recognition
 - Sequence-related applications, e.g. age estimation from facial videos
 - Person Re-Identification
-

Review Experience

- 2019: IJCAI
 - 2018: ICML, ICPR, NIPS, Pattern Recognition
 - 2017: NIPS, Applied Soft Computing
 - 2016: Transactions on Neural Networks and Learning Systems (TNNLS)
-

Publications

Conference paper:

- Canmiao Fu*, **Wenjie Pei***, Qiong Cao, Chaopeng Zhang, Xiaoyong Shen, Yong Zhao and Yu-wing Tai (*Equal contribution). Non-local Recurrent Neural Memory for Supervised Sequence Modeling. International Conference on Computer Vision (**ICCV**) **Oral** (4.3% acceptance rate), 2019.
- Lei Ke, **Wenjie Pei**, Ruiyu Li, Xiaoyong Shen and Yu-wing Tai. Reflective Decoding Network for Image Captioning. International Conference on Computer Vision (**ICCV**), 2019. The work is conducted by my intern Lei Ke under my supervision.
- Yunqiang Li*, **Wenjie Pei***, Yufei Zha and Jan van Gemert (*Equal contribution). Push for Quantization: Deep Fisher Hashing. **BMVC Oral** (4.7% acceptance rate), 2019.
- **Wenjie Pei**, Jiyuan Zhang, Xiangrong Wang, Lei Ke, Xiaoyong Shen and Yu-wing Tai. Memory-Attended Recurrent Network for Video Captioning. IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2019.
- **Wenjie Pei***, Jie Yang*, Zhu Sun, Jie Zhang, Alessandro Bozzon and David MJ Tax (*Equal contribution). Interacting Attention-gated Recurrent Networks for Recommendation. ACM International Conference on Information and Knowledge Management (**CIKM**), full paper, 2017.
- **Wenjie Pei**, Tadas Baltrušaitis, David M.J. Tax and Louis-Philippe Morency. Temporal Attention-Gated Model for Robust Sequence Classification. IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2017.
- Hoang Thanh Lam, **Wenjie Pei**, Adriana Prado, Baptiste Jeudy, Élisabeth Fromont, Toon Calders. Mining Top-K Largest Tiles in a Data Stream. The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (**ECML PKDD**), 2014.
- Jin Huang, **Wenjie Pei**, Chunfeng Wen, Guoning Chen, Wei Chen, Hujun Bao. Output-Coherent Image-Space LIC for Surface Flow Visualization. IEEE Pacific Visualization (**PacificVis**), full paper, 2012.

Journal papers:

- Weinong Wang*, **Wenjie Pei***, Qiong Cao, Shu Liu, Xiaoyong Shen and Yu-wing Tai (*Equal contribution). Orthogonal Center Learning with Subspace Masking for Person Re-identification. Transactions on Image Processing (**TIP**) (Impact Factor: 6.79), 2019, under review.
- **Wenjie Pei**, Hamdi Dibeklioğlu, Tadas Baltrušaitis and David M.J. Tax. Attended End-to-end Architecture for Age Estimation from Facial Expression Videos. Transactions on Image Processing (**TIP**) (Impact Factor: 6.79), 2018, minor revision.
- **Wenjie Pei**, Hamdi Dibeklioğlu, David MJ Tax and Laurens van der Maaten. Multivariate Time Series Classification using the Hidden-Unit Logistic Model. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**) (Impact Factor: 11.68), 2017.
- Jin Huang, Muyang Zhang, **Wenjie Pei**, Hujun Bao. Controllable Highly Regular Triangulation, **CHINAGRAPH 2010** and **SCIENCE CHINA-Information Sciences** (Impact Factor: 2.73), 2011.

Preprint papers:

- **Wenjie Pei**, David M.J. Tax. Unsupervised Learning of Sequence Representations by Autoencoder. **arXiv** 2018.
 - **Wenjie Pei**, David M.J. Tax and Laurens van der Maaten. Modeling Time Series Similarity with Siamese Recurrent Networks. **arXiv** 2016.
-

Patents

4 patents conducted in Tencent, which are confidential temporarily.

Supervised Interns or students

- 12/2018 – present, Jiadong Liang
PhD in State Key Lab of Virtual Reality Technology and Systems, Beihang University
Co-Supervising with Prof. Feng Lu.
 - 10/2017 – 06/2018, Yunqiang Li
PhD in Pattern Recognition and Computer Vision Laboratory, Delft University of Technology
Co-Supervised with Prof. Jan van Gemert.
 - Supervised interns in Tencent:
Canmiao Fu, master in Peking University
Lei Ke, undergraduate in Wuhan University
Xinchen Wang, master in Tongji University
Chaopeng Zhang, master in Peking University
Jianbin Lian, master in Tsinghua University
Zihui Jia, master in Peking University
-