Yao Rong

CONTACT INFORMATION

University of Tübingen
Dpt. of Computer Science
Human-Computer Interaction
Sand 14, 72076, Tübingen, Germany

☑ yao.rong@uni-tuebingen.de

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EDUCATION

Ph.D., Computer Science, 2019.09 – present

- University of Tübingen, Germany
- Adviser: Professor Enkelejda Kasneci
- Area of Study: Human-Computer Interaction

M.S., Electrical and Computer Engineering, 2016.10 – 2019.06

- Technical University of Munich, Germany
- Thesis Topic: Real-time Hand Gesture Recognition based on a ToF Camera
- Area of Study: Human-Machine Communication
- GPA: 3.8 (German GPA: 1.3)

B.Eng., Mechatronics, 2012.09 – 2016.09

- Munich University of Applied Sciences, Germany & Tongji University, China (Dual degree program)
- Thesis Topic: Real-time Hand Gesture Detection and Tracking with OpenCV Library on Android Devices

RESEARCH PUBLICATIONS

- [1] Rong,Y.*, Leemann, T.*, Borisov, V., Kaneci, G., & Kasneci, E. (2022) Evaluating feature attribution: An information-theoretic perspective Thirty-ninth International Conference on Machine Learning (ICML)
- [2] Rong, Y., Kassautzki, N.-R., Fuhl, W., & Kasneci, E. (2022)

 Where and what: Driver attention-based object detection

 Proceedings of the ACM on Human-Computer Interaction (PACMHCI)
- [3] Rong, Y., Castner, N., Bozkir, E., & Kasneci, E. (2022)

 User Trust on an Explainable AI-based Medical Diagnosis Support System

 TRAIT at Conference on Human Factors in Computing Systems (CHI-TRAIT)
- [4] Rong, Y., Xu, W., Akata, Z., & Kasneci, E. (2021) Human attention in fine-grained classification In 2021 British Machine Vision Conference (BMVC)
- [5] Rong, Y., Han, C., Hellert, C., Loyal, A., & Kasneci, E. (2021)
 Artificial intelligence methods in in-cabin use cases: A survey
 IEEE Intelligent Transportation Systems Magazine (ITSM)
- [6] Rong, Y., Akata, Z., & Kasneci, E. (2020) Driver intention anticipation based on in-cabin and driving scene monitoring In 2020 IEEE 23rd International Conference on Intelligent Transportation Systems (ITSC)
- [7] Köpüklü, O., Ledwon, T., Rong, Y., Kose, N., & Rigoll, G. (2020) Drivermhg: A multi-modal dataset for dynamic recognition of driver micro hand gestures and areal-time recognition framework. In 2020 15th IEEE International Conference on Automatic Face and Gesture Recognition (FG).

- [8] Fuhl, W., Rong, Y., Motz, T., Scheidt, M., Hartel, A., Koch, A., & Kasneci, E. (2020) Explainable online validation of machine learning models for practical applications In 2020 25th International Conference on Pattern Recognition (ICPR)
- [9] Fuhl, W., Rong, Y., & Kasneci, E. (2020)

Fully convolutional neural networks for raw eye tracking data segmentation, generation, and reconstruction.

In 2020 25th International Conference on Pattern Recognition (ICPR)

[10] Köpüklü, O., Rong, Y., & Rigoll, G. (2019)

Talking with your hands: Scaling hand gestures and recognition with CNNs. In *Proceedings of the IEEE/CVF International Conference on Computer Vision Workshops (ICCVW)*

RESEARCH PROJECTS

Joint Research Project, 2020

- Human Attention in Computer Vision Applications
- with the research group EML (Explanable Machine Learning), University of Tübingen
- Adviser: Professor Zeynep Akata

Internship, 2018 – 2019

- Real-time Hand Gesture Recognition based on a ToF Camera
- at Infineon Tech-nologies AG, Germany

Research Project, 2019

- "Channel Multiplexing" Module Design
- at the research group Integrated Systems, Technical University of Munich

Research Project, 2018

- Gait Recognition Using a Neural Network Autoencoder
- at the research group Human-Machine Communication, Technical University of Munich

TEACHING EXPERIENCE

University of Tübingen

- Postgraduate seminar on Advanced Topics in Human-Computer Interaction, 2021
- Graduate seminar on Introductory Topics in Human-Computer Interaction, 2020
- Postgraduate course on Multimodal Human-Computer Interaction, 2020
- Mentoring four Master and Bachelor theses, 2020-2021

Technical University of Munich

• (Teaching Assistant) Postgraduate course on SystemC, 2018

SERVICE

Conference Organizing Committee

• the 14th ACM Symposium on Eye Tracking Research and Applications (ETRA 2022), Diversity & Inclusion Chair

Student Advisory Service

• at the Department of Computer Science, University of Tübingen

SKILLS

Programming Languages

• Python, C, C++, Java, Matlab

Languages

• English, German, Chinese (native)

Tools & Libraries

• Pytorch, Tensorflow, TeX, OpenCV, JFace, SWT, Verilog, etc.