Ya-Meng Wang (王亚猛)

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Education

➢ **Master** University of Chinese Academy of Sciences
   Major in: Computer Science
   2018.09 - Present

➢ **Bachelor** Capital Normal University. Rank:1/30
   Major in: Information Management and Information System
   2014.09 - 2018.07

Research Interest

➢ Computational cyber psychology, affective computing
➢ Specifically, my research concentrates on online/offline behavior analysis and psychological characteristic recognition. I currently focus on using ensemble learning to recognize humans' psychological characteristics based on multimodal behavioral data.

Publications

➢ **Ya-Meng Wang**, Jing-Wen Wang, Jia-Li Liu, Fen-Ying Zang and Ting-Shao Zhu: Identifying linguistic differences between empty-nest and non-empty-nest youth on Weibo, Hum Behav & Emerg Tech, 1:190-199, 2019.
➢ **Ya-Meng Wang**, Nan Zhao, Xiaoqian Liu, Sinan Karaburun, Mario Chen and Ting-Shao Zhu: Identifying Big Five personality traits through Controller Area Network bus data. Journal of Advanced Transportation, 2020.
➢ **Ya-Meng Wang**, Xiao-Tong Ren, Xiao-Qian Liu, Ting-Shao Zhu: Examining the Correlation between Depression and Social Behavior on Smartphones through Usage Metadata: An Empirical Study. JMIR mHealth and uHealth, 9(1), 2021.
➢ Nan Zhao, Zhan Zhang, **Ya-Meng Wang**, Jing-Ying Wang, Bao-Shao, Ting-Shao Zhu and Yuan-Yuan Xiang: See your mental state from your walk: Recognizing anxiety and depression through Kinect-recorded gait data, PLOS ONE, 14(5), 2019.
➢ Xing-Yun Liu, Bing-Li Sun, Zhan Zhang, **Ya-Meng Wang**, HaiNa Tang and Ting-Shao Zhu: Gait can reveal sleep quality with machine learning models, PLOS ONE, 2019.
➢ Qian-Ying Ma, Rui-Lin Wu, **Ya-Meng Wang**, Xiao-Qian Liu, Ting-Shao Zhu and Wei-Qiang Wang: Motion Capture Based Measurement Technology for Mental Fatigue under Body Weight Support Situation, Space Medicine & Medical Engineering, 32(4), 2019.

Research Projects

➢ Psychological characteristics recognition based on smartphone usage behaviors
   2019.07 - Present
   We developed an Android application named MobileSens to record users' usage behaviors automatically. Then we explored the relationship between smartphone usage behaviors and psychological characteristics and then predict these characteristics with machine learning

methods. *The research plan and algorithm were designed by my mentor, our laboratory members of our and me, and implemented by our laboratory members and me*.

- ➢ User portrait construction based on online text data   2018.10 – 2019.10

  Taking the Sina Weibo users as the research object, our project was divided into two stages: first, obtain the microblog data of empty-nest youths and non-empty-nest youths; second, explore linguistic differences between them, and further construct user portraits from the psychological perspective of empty-nest youths. *The research plan and algorithm were designed by my mentor and me and implemented by me. The draft paper was written by me.*

- ➢ Psychological characteristics recognition based on gait data   2018.09 - Present

  We firstly obtained the gait pattern of individuals by Kinect, then extracted the features from these data by time-frequency analysis, and finally established the psychological characteristics recognition model by machine learning. *The algorithm was designed by my mentors, our laboratory members and me, and implemented by our laboratory members and me. The draft paper was written by our laboratory members and me*.

- ➢ Big Five personality traits recognition based on driving data   2018.09 - 2019.09

  The research content of this project was to mine the features related to personality traits from the driving data obtained from the on-board sensors of BMW I3s, and then these features were used to predict the Big Five personality traits of drivers. This method can be applied to the personalization driving assistance system and marketing. *The algorithm was designed by my mentors and me and implemented by me. The draft paper was written me.*

- ➢ Node importance analysis in social networks   2016.03 - 2017.03

  In this project, we propose a new method for node importance analysis in social networks based on weighted-node-coritivity. We used web crawlers to crawl user relationships from Sina Weibo, built user relationship network maps, and calculated the importance of user nodes. *The algorithm was designed by my mentors and me and implemented by me.*

Research Experience

- ➢ Research Intern in Institute of Psychology, CAS   2018.03 - Present
- ➢ Research Intern in Beijing University of Posts and Telecommunications   2017.06 - 2017.09

Honors & Awards

- ➢ Merit Student of University of Chinese Academy of Sciences   2020
- ➢ Outstanding Bachelor Graduate of Beijing   2018
- ➢ Merit Student of Beijing   2017
- ➢ Merit Student of Capital Normal University   2016
- ➢ "Social Practice Scholarship" of Capital Normal University   2016
- ➢ National Encouragement Scholarship   2017,2016,2015

Skills

- ➢ Development: Python, C, C++, Java
- ➢ Other: Hadoop, SPSS, MySQL