
EDUCATION

- 2020–Now **Ph.D. at Hong Kong University of Science and Technology, HCII, CSE Department.**
◦ Advised by: Prof. Xiaojuan Ma
- 2017–2020 **M.Sc. at Chinese Academy of Science, HCI Lab, Institute of Software.**
Master of Computer Science and Technology
◦ Advised by: Prof. Feng Tian and Prof. Xiangmin Fan
◦ Thesis: "User Personalized Modeling Method and Application Based on Mixed-initiative Interaction"
- 2013–2017 **B.Sc. at Harbin Institute of Technology, School of Computer Science.**
Bachelor of Engineering in Software Engineering
◦ Thesis: "A Mobile Based Neurological Function Evaluation System"

PUBLICATIONS

- 2022 [J.1] **Shuai Ma**, Mingfei Sun, Xiaojuan Ma. Modeling Adaptive Expression of Robot Learning Engagement and Exploring its Effects on User during Human Demonstration. In *TOCHI*.
- [C.8] **Shuai Ma**, Taichang Zhou, Fei Nie, Xiaojuan Ma. Glancee: An Adaptable System for Instructors to Grasp Student Learning Status in Synchronous Online Classes. In *Proc. CHI2022*.
- 2021 [C.7] Liuping Wang, Dakuo Wang, Feng Tian, Zhenhui Peng, Xiangmin Fan, Zhan Zhang, **Shuai Ma**, Mo Yu, Xiaojuan Ma, Hongan Wang. CASS: Towards Building a Social-Support Chatbot for Online Health Community. In *Proc. CSCW2021*.
- 2019 [C.6] Qian Zhu, **Shuai Ma**. What Did I Miss? Assisting User adaptive Missed Content Reviewing in MOOC Learning. In *Proc. UIST2019 Adjunct*.
- [C.5] Qian Zhu, **Shuai Ma**, Cuixia Ma. Pre-screen: Assisting Material Screening in Early-stage of Video Editing. In *Proc. UIST2019 Adjunct*.
- [C.4] **Shuai Ma**, Zijun Wei, Feng Tian, Xiangmin Fan, Jianming Zhang, Xiaohui Shen, Zhe Lin, Jin Huang, Radomir Mech, Dimitris Samaras, and Hongan Wang. SmartEye: Assisting Instant Photo Taking via Integrating User Preference with Deep View Proposal Network. In *Proc. CHI2019*.
- [C.3] Yunzhi Li, Liuping Wang, **Shuai Ma**, Xiangmin Fan, Zijun Wang, Junfeng Jiao, and Dakuo Wang. Human-AI Interaction in Healthcare: Three Case Studies About How Patient(s) And Doctors Interact with AI in a Multi-Tiers Healthcare Network. In *CHI2019 Workshop*.
- 2018 [C.2] Jing Gao, Feng Tian, Junjun Fan, Dakuo Wang, Xiangmin Fan, Yicheng Zhu, **Shuai Ma**, Jin Huang, and Hongan Wang. Implicit Detection of Motor Impairment in Parkinson's Disease from Everyday Smartphone Interactions. In *Proc. CHI2018 EA*.
- [C.1] Liuping Wang, Xiangmin Fan, Feng Tian, Lingjia Deng, **Shuai Ma**, Jin Huang, and Hongan Wang. mirrorU: Scaffolding Emotional Reflection via In-Situ Assessment and Interactive Feedback. In *Proc. CHI2018 EA*.

EMPLOYMENT EXPERIENCE

- 2018.1–2018.3 **Netease Beijing R&D Center Youdao NLP Group**, A Rule-Based MT Model for Classical Chinese - Modern Chinese Translation
Built a dictionary of regular words in classical Chinese and developed a segmentation method based on RMM.
Built a phrase-based model for translation and got a BLEU score of 0.91 (unigram), 0.84 (bigram) and 0.71 (trigram).
- 2017.6 – 2017.8 **LOHAS Tech (A startup company) Machine Learning Group**, Wave Form Recognition Model in Electrocardiogram (ECG) Signal

Implemented ECG recognition model proposed by Andrew Ng to detect P,Q,R,S,T wave in ECG signal. Model was trained on MIT-BIH dataset and tested on ECG data from real patient and got an average accuracy of 99.3%.

Designed a 5-dimensional feature vector and deployed agglomerative clustering method to merge similar clusters to recognise 4 kinds of noise (MA, WB, MI, ACI). The proposed method achieved Sn: 88.05%, Sp: 92.46%, Ac: 91.22% on real ECG dataset.

2016.9–2017.5 **Institute of Software, Chinese Academy of Sciences HCI Lab**, Evaluation of neurological function in mobile environment based on MRI

Explored the feasibility and accuracy of detecting motor impairment in early PD via sensing and analyzing users' common touch gestural interactions on smartphones.

Investigated four types of common gestures, including flick, drag, pinch, and handwriting gestures, and propose a set of features to capture PD motor signs.

Academic Services

Reviewers ACM CHI 2019, 2020, 2022, UIST 2022, CHI EA 2022, WWW 2021, CCF Transactions on Pervasive Computing and Interaction

Student CHI 2022
Volunteer

AWARDS AND HONORS

2022 CHI'22 Student Volunteer Award

2020 HKUST Redbird PhD Scholarship

2019 President Scholarship in Chinese Academy of Sciences (top 1%)

Excellent Paper Award at the Annual Academic Conference of ISCAS

Honorable Mention Award at ACM CHI 2019 (1st author) (top 5% in all submission)

Pacemaker of Merit Student of UCAS (top 1%)

First-Class Student Scholarship in UCAS (top 10%)

2018 National Scholarship for Graduate (top 1%)

Pacemaker of Merit Student of UCAS (top 1%)

Excellent Student Cadres of UCAS

First-Class Student Scholarship in UCAS (top 10%)

Excellent Communist Party Member of UCAS

2017 Excellence Award for Science Creation Program of Chinese Academy of Sciences

Special Scholarship for Undergraduates & the best 10 students of HIT (top 0.1%)

Excellent Graduates of Province (top 1%)

Excellent Graduates in Harbin Institute of Technology

Before 2016 National Scholarship for Undergraduate (top 1%)

Pacemaker of Merit Student of HIT (top 0.1%)

Pacemaker to Merit Student Cadres of HIT (top 0.1%)

Excellent Student Cadres of HIT (2014, 2015, 2016)

Merit Student of HIT (2014, 2015, 2016)

Excellent Student Scholarship in HIT (2014, 2015, 2016)

COMPETITIONS

2021 Kaggle Natural Language Processing with Disaster Tweets **Rank: top 5%**

2018 Huawei Cup Free Software Programming Competition **Winner**

2018 Kaggle WAD Video Segmentation Challenge (held by CVPR 2018). Semantic Segmentation and Recognition of Road Vehicles **Rank: 4th/141 teams**

2018 6th Emotion Recognition in the Wild Challenge (EmotiW 2018, held by ICMI). Audio-video Emotion Recognition **Rank: top 10%**

2016 5th National Marine Vehicle Design and Manufacturing Competition **Winner**

2016 18th National Robot Championship **Winner** *3

2015 *Tianchi* Big Data Competition-Sina Weibo Interactive Prediction **Rank: top** 5%

TEACHING

2020-2021 COMP 1021 Introduction to Computer Science
Spring

2020-2021 Fall COMP 1021 Introduction to Computer Science

SUPERVISION

2022 Elin Liu, Undergraduate student from KTH, Sweden

Ying Lei, Undergraduate student from East China Normal University, China

2021 Taichang Zhou, Undergraduate student from HKUST, Hong Kong, China

Fei Nie, Undergraduate student from HKUST, Hong Kong, China

PROGRAMMING

Languages I am proficient in Python, JavaScript, HTML, C#, and familiar with Java, C, C++, PHP

Tools & I master Tensorflow, Keras, Pytorch, Scikit-learn, and I have experience with models/methods in CV, NLP
Platforms and Reinforcement Learning