

# HIS 2019

# The 8<sup>th</sup> International Conference on Health Information Science

# **Conference Program**

Sponsor: Shaanxi Normal University

Co-Sponsor: Tsinghua University Xi'an Jiaotong University

Northwestern University

October 18-20, 2019

Xi'an China



## **HIS2019 DETAILED PROGRAM**

(HIS2019 will held on October 18-20, Xi'an, Shaanxi, China)

#### **Day 1 (18th October 2019):**

**Registration and Light Refreshment** 

#### **Day 2 (19th October 2019):**

Opening, two Keynotes and one invited speaker speech, and presentation of the accepted papers

#### Day 3 (20th October 2019):

A discussion session on Health Informatics

#### Registration (Day 1)

Location: WYNDHAM GRAND Hotel.

Time: 10:00AM-10:00PM

#### **Conference Opening (Day 2)**

Location: Academic auditorium at Museum of Education, Chang'an Campus of Shaanxi Normal University, No. 620, West Chang'an Avenue, Chang'an District, Xi'an 710119, China.

Time: 8.30:00-9.00 am, Saturday 19th October 2019 (Day 2)

Opening speech: Vice president of Shaanxi Normal University
Welcome Speech: Prof Yanchun Zhang, Victoria University, Australia
Opening Address & Program Introduction: Prof Hua Wang, Victoria
University, Australia

#### **Keynote Speech:**

Time: 9.00-9.40 am, Saturday 19<sup>th</sup> October 2019 (Day 2)

**Speaker: Kathleen Gray** 

**Title:** Health outcomes and related effects of using social media

Time: 9.40-10.20 am

**Speaker:** Fei Wang

Title: Machine Learning for Precision Medicine: Promises, Challenges and

Opportunitie

#### Tea break

Time: 10:20-10:30 am, Saturday 19th October 2019 (Day 2)

## **Invited speaker:**

Time: 10.30-11:00 am, Saturday 19<sup>th</sup> October 2019 (Day 2)

**Speaker: Jianhui Tian** 

Title: Artificial Intelligence Promotes the Inheritance and Development of

Traditional Chinese Medicine

# <u>Session 1 (Room 1)</u> [20min presentation each (15 min presentation and 5min Question & answer)]

Location: Academic auditorium at Museum of Education, Chang'an Campus of Shaanxi Normal University, No. 620, West Chang'an Avenue, Chang'an District, Xi'an 710119, China.

Time: 11:00 am - 1:00 pm, Saturday 19th October 2019 (Day 2)

**Chair:** Zhisheng Huang, Vrije University of Amsterdam, The Netherlands

## **Group: Medical Information System and Platform**

Paper ID	Authors	Paper Title	Presentation Time
3	Ming Sheng, Jingwen Wang, Yong Zhang, Xin Li, Chao Li, Chunxiao Xing, Qiang Li, Yuyao Shao and Han Zhang	DocKG: A Knowledge Graph Framework for Health with Doctor-in-the-Loop	11:00-11:20
5	Jitao Yang	At Home Genetic Testing Business Process Management Platform	11:20-11:40
20	Lei Hua, Yuntao Ma, Xiangyu Meng, Bin Xu and Jin Qi	A Smart Health-Oriented Traditional Chinese Medcine	11:40-12:00

		Pharmacy Intelligent Service Platform	
21	Xudong Cao, Huifen Xu, Yuntao Ma, Bin Xu and Jin Qi	Research on a Blockchain- based Medical Data Management Model	12:00-12:20
7	Yunyi Feng, Simon Lin, En-Ju Lin, Lesley Farley, Yungui Huang and Chang Liu	Identifying Candidates for Medical Coding Audits: Demonstration of a Data Driven Approach to Improve Medicare Severity Diagnosis-Related Group Coding Compliance	12:20-12:40
9	Yunfei Qi, Shaofu Lin and Zhisheng Huang	Classification of skin pigmented lesions based on deep residual network	12:40-13:00

# <u>Session 2 (Room2)</u> [20min presentation each (15 min presentation and 5min Question & answer)]

Location: Room S123 at Museum of Education, Chang'an Campus of Shaanxi Normal University, No. 620, West Chang'an Avenue, Chang'an District, Xi'an 710119, China.

Time: 11:00 am - 1:00 pm, Saturday 19<sup>th</sup> October 2019 (Day 2)

Chair: Ming Sheng; Tsinghua University, China

## **Group: Mining Medical Data (I)**

Paper ID	Authors	Paper Title	Presentation Time
11	Gong	Identifying IncRNA based on support vector machine	11:00-11:20
12	Zhikang Wang and Hua Guan	Research on the Evaluation of Chinese Herbal Medicine Quality and Safety Credit Index Based on TOPSIS	11:20-11:40
26	Rui Tan, Shuai Ding, Jinxin Pan and Yan Qiu	ICU mortality prediction based on key risk factors identification	11:40-12:00

58	Xiaoyu Zhang and Xin Li	Correlation Study Between Heart Rate Variability Parameters And Motor Function Outcomes In Patients With Chronic Stroke	12:00-12:20
43	Han Zhong and Zhisheng Huang	Research on Document Recommendation Based on Interests of Co-authors for Brain Science	12:20-12:40
8	Jialin Wang, Yanchun Zhang, Qinying Ma, Huihui Huang and Xiaoyuan Hong	Deep Learning for Single- Channel EEG Signals Sleep Stage Scoring based on Frequency Domain Representation	12:40-13:00

#### **Lunch Break**

Time: 13:00-14:00 pm, Saturday 19th October 2019 (Day 2)

# <u>Session 3</u> (Room 1) [20min presentation each (15 min presentation and 5min Question & answer)]

Location: Academic auditorium at Museum of Education, Chang'an Campus of Shaanxi Normal University, No. 620, West Chang'an Avenue, Chang'an District, Xi'an 710119, China.

Time: 14.00-15:40 pm, Saturday 19<sup>th</sup> October 2019 (Day 2)

Chair: Rui Zhang, Northwest University, China

## **Group: EEG and ECG**

Paper ID	Authors	Paper Title	Presentation Time
28	Chris Roadknight, Prapa Rattadilok and Guanyu Zong	Improving understanding of EEG measurements using transparent machine learning models	14:00-14:20

24	Hao Chen, Jiaqi Bai, Luning Mao, Jieying Wei, Jiangling Song and Rui Zhang	Automatic identification of Premature Ventricular Contraction ECG beat	14:20-14:40
25	Luning Mao, Hao Chen, Jiaqi Bai, Jieying Wei, Qiang Li and Rui Zhang	Automatic Detection of First-degree Atrioventricular Block	14:40-15:00
31	Jiaqi Bai, Luning Mao, Hao Chen, Yanan Sun, Qiang Li and Rui Zhang	Feature extraction method for bundle branch block automatic detection	15:00-15:20
2	Wang Zhao, Yufei Pang and Xin Jing	Research and Design of Three-dimensional Brain Augmented Reality System Based on Medical Image Features	15:20-15:40

# <u>Session 4 (Room2)</u> [20min presentation each (15 min presentation and 5min Question & answer)]

Location: Room S123 at Museum of Education, Chang'an Campus of Shaanxi Normal University, No. 620, West Chang'an Avenue, Chang'an District, Xi'an 710119, China.

Time: 14.00-15:40 pm, Saturday 19<sup>th</sup> October 2019 (Day 2)

Chair: Yahan Zhang, Capital Medical University, Beijing, China

## **Group: Medical Image**

Paper ID	Authors	Paper Title	Presentation Time
14	Yan Xu	Deep Learning in Multimodal Medical Image Analysis	14:00-14:20
18	Zihao Wang, Ke-Jia Chen and Lingli Zhang	A R-CNN Based Approach for Microaneurysm Detection in Retinal Fundus Images	14:20-14:40
22	Yucheng Hang, Wen Ge, Hao Jiang, Haojun Li and Wenjun Tan	VR technology-based intelligent cognitive rehabilitation system for Alzheimer's disease	14:40-15:00
13	Wang Zhao	Research on the Construction of Autism Knowledge Map	15:00-15:20

		Information System in Internet Environment	
27	Ting Liu and Zhisheng Huang	Evidence-based Analysis of Neurotransmitter Modulation by Gut Microbiota	15:20-15:40

#### Tea break

Time: 15:40-16:00 pm, Saturday 19<sup>th</sup> October 2019 (Day 2)

# <u>Session 5</u> (Room 1) [20min presentation each (15 min presentation and 5min Question & answer)]

Location: Academic auditorium at Museum of Education, Chang'an Campus of Shaanxi Normal University, No. 620, West Chang'an Avenue, Chang'an District, Xi'an 710119, China.

Time: 16.00-18:00 pm, Saturday 19th October 2019 (Day 2)

Chair: Juanying Xie, Shaanxi Normal University, China

#### **Group: Healthcare**

Paper ID	Authors	Paper Title	Presentation Time
32	Zhengrui Xue, Luning Yang, Prapa Rattadilok, Shanshan Li and Longyue Gao	Quantifying the Effects of Temperature and Noise on Attention-Level using EDA and EEG Sensors	16.00-16.20
34	Zhisheng Huang, Haiyuan Wang, Qing Hu, Gang Wang, Jie Yang and Yahan Zhang	Semantic Processing of Personality Description for Depression Patients	16.20-16.40
4	Jitao Yang	Genetically Tailored Sports and Nutrition Actions to Improve Health	16.40-17.00
15	Feng Lin, Shusong Mao and Dan Xie	Research on Evaluation Method of TCM Intervention Technology for Obesity Based on Literature	17.00-17.20
17	Ziqin Fei, Feng Lin and Dan Xie	Bibliometrics Analysis of TCM Intervention	17.20-17.40

		Technology for Simple Obesity Patients	
19	Marjo Rissanen	Ways in Enhancing the Substance in Consumer Targeted eHealth	17.40-18.00

# <u>Session 6 (Room2)</u> [20min presentation each (15 min presentation and 5min Question & answer)]

Location: Room S123 at Museum of Education, Chang'an Campus of Shaanxi Normal University, No. 620, West Chang'an Avenue, Chang'an District, Xi'an 710119, China.

Time: 16.00-18:00 pm, Saturday 19th October 2019 (Day 2)

Chair: Chris Roadknight, University of Nottingham

## **Group: Selected papers for HISC journal**

Paper ID	Authors	Paper Title	Presentation Time
29	Jiahua Du, Sandra Michalska, Sudha Subramani, Hua Wang and Yanchun Zhang.	Neural Attention with Character Embeddings for Hay Fever Detection from Twitter	16.00-16.20
23	Xuetong Wu, Hadi Akbarzadeh Khorshidi, Uwe Aickelin, Zobaida Edib and Michelle Peate.	Imputation techniques on missing values for breast cancer treatment and fertility data	16.20-16.40
38	Daniel Lee, Hong Xu, Yuan Miao and Huai Liu.	Analysis of the Chinese Herbal Medicine' Effect on Breast Cancer Pattern	16.40-17.00
16	Yukang Wang, Le Sun, Jinyuan He and Haoyuan Li.	A stacked LSTM for Atrial Fibrillation-prediction based on multivariate ECGs	17.00-17.20
52	Juanying Xie, Yuchen Wang and Zhaozhong Wu.	Colon cancer data analysis by chameleon algorithm	17.20-17.40
57	Xin Li.	Automatic Approach for Constructing a Knowledge Graph of Knee Osteoarthritis in Chinese	17.40-18.00

## BANQUET (Day 2)

Time: 8:00-10:00 pm; Saturday 19<sup>th</sup> October 2019 (Day 2)

Location: Bestway Hotel Qujiang, Xi'an

## Day 3 (20th October 2019)

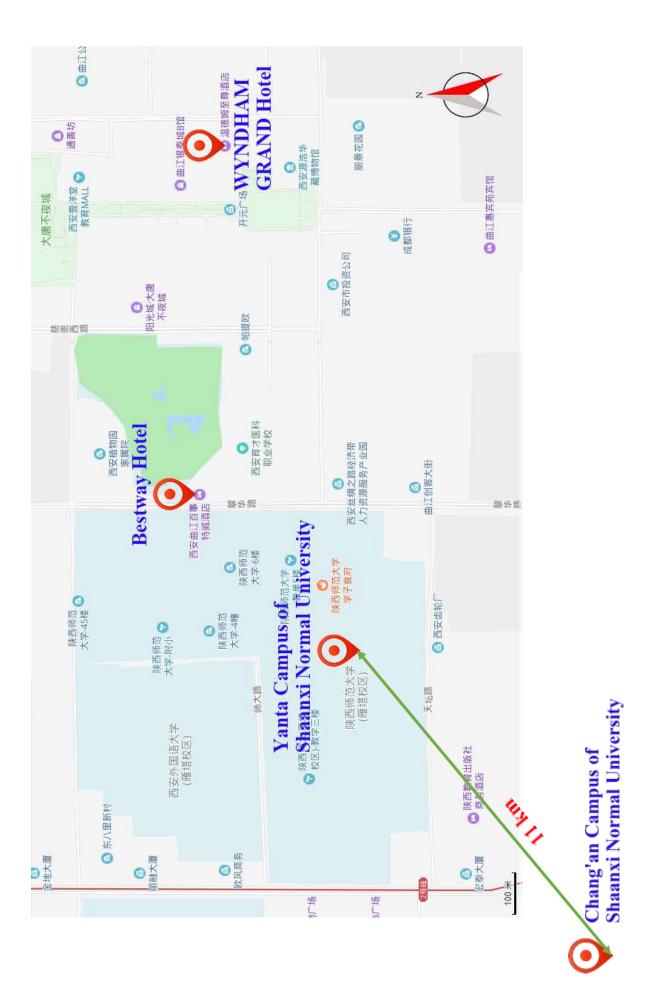
#### **PANEL SESSION:**

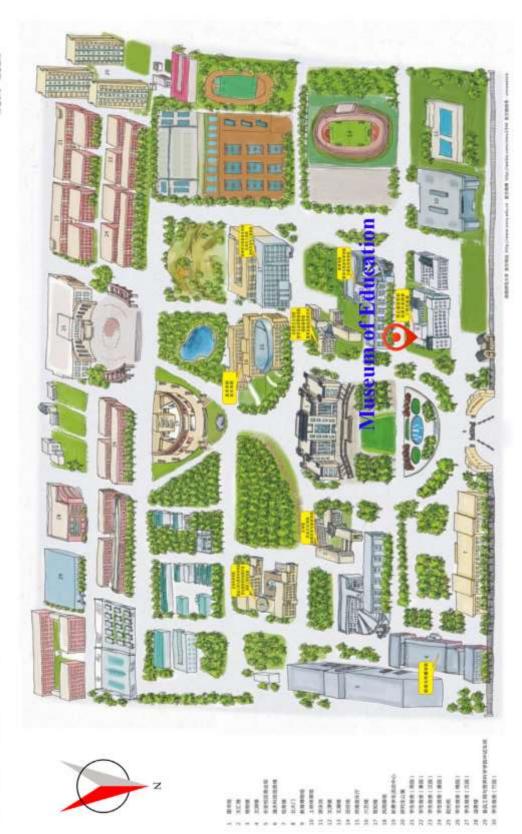
"New dimensions of Future Health Informatics research"

Location: Yanta Campus: No. 199, South Chang'an Road, Yanta District, Xi'an

710062, China.

Time: 4:10-5:30 pm, Sunday 20th October 2019 (Day 3)





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