### HIS2021 Program Plan

### (HIS2021 will held on October 25-28, Melbourne, Australia)

### Day 1 (25<sup>th</sup> October 2021):

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

### Day 2 (26<sup>th</sup> October 2021):

One Keynote and one invited speaker speech, and presentation of the accepted papers

**Day 3 (27th October 2021)**: a discussion session on Health Informatics

### **Conference Opening (Day 1)**

Time: The conference time is in Melbourne Time Zone: https://www.timeanddate.com/worldclock/australia/melbourne

Location: Zoom Zoom ID: 768 854 0778 Passcode: 251021 Zoom Link: https://victoriauniversity.zoom.us/j/7688540778?pwd=SWRJQmxTSnM0VTNMa WM5azI4S3pjdz09

Time: 8.30:00-9.00 am, Monday 25<sup>th</sup> October 2021 (Day 1)

Welcome Speech: Prof Yanchun Zhang, Victoria University, Australia

**Opening Address & Program Introduction:** Prof Hua Wang, Victoria University, Australia and Dr Siuly Siuly, Victoria University, Australia

#### Keynote Speech 1:

Keynote Chair: Prof Hua Wang, Victoria University, Australia

Time: 9.00-9.50 am (including 10 min ques.& Ans.), Monday  $25^{th}$  October 2021 (Day 1)

**Speaker:** Prof. Zhisheng Huang, Vrije University of Amsterdam, Netherlands

Title: "Web-based intelligent agents for suicide monitoring and early warning"

### Keynote Speech 2:

Keynote Chair: Dr Siuly Siuly, Victoria University, Australia

Time: 9.50-10.30 am (including 10 min ques.& Ans.), Monday 25<sup>th</sup> October 2021 (Day 1)

Speaker: Professor Jeffrey Soar,

Chair in Human-Centred Technology, School of Business, University of Southern Queensland, Australia.

# Title: "Addressing the gap between the needs of older people and adoption of technology".

Time: 10:30-10:40 am, Monday 25<sup>th</sup> October 2021 (Day 1)

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

Time: 10:40 am – 12:20 pm, Monday 25<sup>th</sup> October 2021 (Day 1)

Session Chair: Prof Hua Wang, Victoria University, Australia

### **Group: Health Informatics**

Paper ID	Authors	Paper Title	Presentation Time
16	K Venkatachalam, Nebojsa Bacanin, Enamul Kabir, and P Prabu	A Atrous Spatial Pyramid Pooling Technique based EffUnet model For Glaucoma Detection	10:40-11:00
12	Jitao Yang.	Strengthen Immune System Based on Genetic Testing and Physical Examination Data	11:00-11:20
8	Miguel Atienza- Maderuelo, Paloma Collado and Fernando Martin-Sanchez.	Generating data models to manage individual information related to environmental risk factors and social determinants of health.	11:20-11:40
52	Payam Kaywan, Khandakar Ahmed, Yuan Miao,	Ayman Ibaida and Bruce Gu. DEPRA: An Early Depression Detection Analysis Chatbot	11:40-12:00
7	Jitao Yang.	Personalized Skin Care Service based on Genomics	12:00-12:20

### Lunch Break

Time: 12:20-13:00 pm, Monday 25<sup>th</sup> October 2021 (Day 1)

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

Time: 13:00pm - 14:40 pm, Monday 25<sup>th</sup> October 2021 (Day 1)

**Session Chair:** Dr Varun Bajaj, Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Jabalpur, India

#### Group: COVID-2019

Paper ID	Authors	Paper Title	Presentation Time
5	Chaohui Guo, Shaofu Lin, Zhisheng Huang, Chengyu Shi and Yahong Yao.	Research on the Fluctuation Characteristics of Social Media Message Sentiment with Time Before and During the COVID-19 Epidemic	13:00-13:20
55	Sajjad Ahmed, Anup Shrestha and Jianming Yong.	Towards a user-level self- management of COVID-19 using mobile devices supported by Artificial Intelligence, 5G and the Cloud	13:20-13:40
26	Samsad Jahan and Forkan Ali.	Advancing Health Information System: Analysis of Prospects and Challenges of E-Health in Bangladesh During COVID- 19	13:40-14:00
28	Rasel Ahmed and Forkan Ali	Commencement and Acceptability of Tele- Rehabilitation Among Rohingya and Host Community People during COVID-19	14:20-14:40

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

Time: 14.40-16:00 pm, Monday 25<sup>th</sup> October 2021 (Day 1)

Session Chair: Dr Enamul Kabir, University of Southern Queensland, Australia

### **Group: Medical Data Mining**

Paper ID	Authors	Paper Title	Presentation Time
15	Durgesh Samariya and Jiangang Ma.	Mining outlying aspects on healthcare data	14:40-15:00
18	Peng Ren, Weihang Lin, Ye Liang, Ruoyu Wang, Xingyue Liu, Baifu Zuo, Tan Chen, Xin Li, Ming Sheng and Yong Zhang.	<u>HMDFF: A Heterogeneous</u> <u>Medical Data Fusion</u> <u>Framework Supporting</u> <u>Multimodal Query</u>	15:00-15:20
10	Peng Ren, Wei Hou, Ming Sheng, Xin Li, Chao Li and Yong Zhang.	MKGB: A Medical Knowledge Graph Construction Framework Based on Data Lake and Active Learning	15:20-15:40
53	Li Chenyang and Sun Le.	Multi-label anomaly classification for Medical data stream	15:40-16:00

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

ZOOM ID: 857 9518 2880 Passcode: 442222 Zoom link: https://victoriauniversity.zoom.us/j/85795182880?pwd=N3ILeDNNYi9qU1RiWDN yYW1iQkVsZz09

Keynote session Chair: Dr Kate Wang, RMIT, Australia

### Keynote Speech 3:

Time: 9.00-9.50 am (including 10 min ques.& Ans.), Tuesday 26<sup>th</sup> October 2021 (Day 2)

Speaker: Prof. Juanying Xie, Shaanxi Normal University, China

## **Title:** "The analyses of histopathological images of breast cancers using supervised and unsupervised deep learning techniques".

### Keynote Speech 4:

Time: 9.50-10.30 am (including 10 min ques.& Ans.), Tuesday 26<sup>th</sup> October 2021 (Day 2)

**Speaker:** Dr Samanta Lalic (Wood), Assistant Deputy Director of Pharmacy - Monash Health Adjunct Research Fellow, Centre for Medicine Use and Safety, Faculty of Pharmacy and Pharmaceutical Sciences, Monash University

**Title:** "The integration of clinical pharmacy services with Electronic Medical Records".

### <u>Tea break</u>

Time: 10:30-10:40 am, Tuesday 26<sup>th</sup> October 2021 (Day 2)

# <u>Session 1 (day 2): [20min presentation each (15 min presentation and 5min Question & answer)]</u>

Time: 10:40-12:20 pm, Tuesday 26<sup>th</sup> October 2021 (Day 2)

Session Chair: Dr Enamul Kabir, University of Southern Queensland, Australia

### Group: Biomedical signal and Image processing and analysis

Paper ID	Authors	Paper Title	Presentation Time
2	Muhammad Tariq Sadiq, Siuly Siuly, Ateeq Ur Rehman and Hua Wang.	Auto-correlation based feature extraction approach for EEG Alcoholism Identification	10:40-11:00
17	Mingkan Shen, Peng Wen, Bo Song and Yan Li	ADHD children identification based on EEG using effective connectivity techniques	11:00-11:20
6	Hesam Akbari, Muhammad Tariq Sadiq, Siuly Siuly, Yan Li and Paul Wen.	A Novel Computerized Framework with Diagnostic Index for Identification of Normal and Depression EEG Signals	11:20-11:40
25	Dines Pandey and Hua Wang.	Automatic breast lesion segmentation using continuous max-flow algorithm in phase preserved DCE-MRIs	11:40-12:00
38	Mohammed Diykh, Atheer Y.Oudah, Shahab Abdulla and Haydar Abdulameer Marhoon.	A novel Alcoholic EEG signals Classification Approach Based on AdaBoost k-means Coupled with Statistical Model	12:00-12:20

### Lunch Break

Time: 12:20-13:00 pm, Tuesday 26<sup>th</sup> October 2021 (Day 2)

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

Time: 13.00-15:00 pm, Tuesday 26<sup>th</sup> October 2021 (Day 2)

Session Chair: Dr Ravinder Singh, Victoria University, Australia

Group: Modelling in Public Health data	
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Paper ID	Authors	Paper Title	Presentation Time
20	Atikur Rahman, Zakir Hossain, Enamul Kabir and Rumana Rois.	<u>Machine learning algorithm</u> for modelling infant mortality in Bangladesh	13:00-13:20
21	Hasan Jamil, Evanthia Bernitsas, Alexander Gow and Berhane Seyoum.	Empowering Patients with HIPAA Aware Personal Health Libraries	13:20-13:40
11	Xiaomin Jing, Shaofu Lin and Zhisheng Huang.	Research on the Early Warning of Suicide Identification Based on Microblog "Tree Hole"	13:40-14:00
3	Yingxiang Zhang, Xiangyun Liao, Li Chen, Hongjun Kang, Yunpeng Cai and Qiong Wang. (short paper)	<u>Multi-BERT-wwm Model</u> <u>based on Probabilistic</u> <u>Graph Strategy for Relation</u> <u>Extraction</u>	14:20-14:40
1	Chetanpal Singh.	Applications and Challenges of Deep Learning in Computer Vision	14:40-15:00