

# HIS2022 Program Plan

(HIS2022 will held on October 28-30, Biarritz, France)

## Day 1 (28<sup>th</sup> October 2022):

Opening, one Keynote and presentation of the accepted papers

## Day 2 (29<sup>th</sup> October 2022):

One Keynote and presentation of the accepted papers

## Day 3 (30<sup>th</sup> October 2022):

a discussion session on Health Informatics

## Conference Opening (Day 1)

### **Time:**

The conference will be run in Biarritz, France Time.

Biarritz, France Time Zone:

<https://www.timeanddate.com/worldclock/france/biarritz>

Location: Zoom

**Zoom ID: 839 6041 6791**

**Passcode: 175328**

**Zoom Link:**

<https://victoriauniversity.zoom.us/j/83960416791?pwd=dy9xOGNrTEcvOTIOWVIzakkyQ0lCUT09>

Time: 8.30:00-8.45am, Friday 28<sup>th</sup> October 2022 (Day 1)

**Welcome Speech:** Prof Yanchun Zhang, Victoria University, Australia

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

### **Keynote Speech 1:**

**Keynote Chair:** Prof Hua Wang, Victoria University, Australia

Time: 8:45-9:45 am (including 10 min ques.& Ans.), Friday 28<sup>th</sup> October 2022 (Day 1)

**Speaker:** Prof. Alejandro Rodríguez-González, Universidad Politécnica de Madrid, Spain

**Title:** “[Data-driven drug repurposing hypotheses using heterogeneous types of data: the DISNET approach](#)”

### **Tea break**

Time: 9:45-10:00 am, Friday 28<sup>th</sup> October 2022 (Day 1)

### **Session 1: [20min presentation each (15 min presentation and 5min Question & answer)]**

Time: 10:00 am – 12:00 pm, Friday 28<sup>th</sup> October 2022 (Day 1)

**Session Chair:** Prof Hua Wang, Victoria University, Australia

### **Group: Health Informatics**

<b>Paper ID</b>	<b>Authors</b>	<b>Paper Title</b>	<b>Presentation Time</b>
3117	Durgesh Samariya and Jiangang Ma.	<a href="#">Anomaly Detection on Health Data</a>	10:00-10:20
3487	Ying Peng, Huiquan Zhang and Juanying Xie.	<a href="#">The nnU-Net based Method for Automatic Segmenting Fetal Brain Tissues</a>	10:20-10:40
8772	Joshua Lee, Joon Soo Park, Hua Wang, Boxi Feng and Kate N Wang.	<a href="#">Assessing the Utilization of TEledentistry from perspectives of early career dental practitioners - development of the UTEL Questionnaire</a>	10:40-11:00
703	Pritam Deka, Anna Jurek-Loughrey and Deepak P.	<a href="#">Evidence extraction to validate medical claims in fake news detection</a>	11:00-11:20
1652	Peng Ren, Xingyue Liu, Shuxin Zheng, Xin Li, Ligong Lu, Xia Wang, Ruoyu Wang and Ming Sheng.	<a href="#">A Hybrid Medical Causal Inference Platform Based on Data Lake</a>	11:20-11:40
6307	Zeyu Wang, Huiying Zhao, Peng Ren, Yuxi Zhou and Ming Sheng.	<a href="#">Learning optimal treatment strategies for sepsis using offline reinforcement learning in continuous space</a>	11:40-12:00

### **Lunch Break**

Time: 12:00-12:30 pm, Friday 28<sup>th</sup> October 2022 (Day 1)

**Session 2: [20min presentation each (15 min presentation and 5min Question & answer)]**

Time: 12:30pm - 14:10 pm, Friday 28<sup>th</sup> October 2022 (Day 1)

**Session Chair:** Dr Siuly Siuly, Victoria University, Australia

**Group: Medical Data Mining**

Paper ID	Authors	Paper Title	Presentation Time
3569	Shuang Ding, Chenyu Mao, Wenkui Zheng, Qi Xiao and Yitao Wu.	<a href="#">Data Exploration Optimization for Medical Big Data</a>	12:30-12:50
7341	Qi Xiao, Wenkui Zheng, Chenyu Mao, Wei Hou, Hao Lan, Daojun Han, Yang Duan, Peng Ren and Ming Sheng.	<a href="#">MHDML:Construction of A Medical Lakehouse for Multi-source Heterogeneous Data</a>	12:50-13:10
4891	Tianbo Xu, Le Sun, Sudha Subramani and Yilin Wang.	<a href="#">Intelligent Interpretation and Classification of Multivariate Medical time series based on Convolutional Neural Networks</a>	13:10-13:30
5034	Hung Ba Ngo and Nguyen Chi Tran.	<a href="#">Improve Data Analytic Performance in Health Information System with Big Data Technology</a>	13:30-13:50
4455	Wei Hou, Wenkui Zheng, Ming Sheng, Peng Ren, Baifu Zuo, Zhentao Hu, Xianxing Liu and Yang Duan.	<a href="#">Medical Knowledge Graph Construction Based on Traceable Conversion</a>	13:50-14:10

**Afternoon tea:**

Time: 14:10-14:25 pm, Friday 28<sup>th</sup> October 2022 (Day 1)

**Session 3: [20min presentation each (15 min presentation and 5min Question & answer)]**

Time: 14.25-15:45 pm, Friday 28<sup>th</sup> October 2022 (Day 1)

**Session Chair:** Dr Yongfeng Ge, Victoria University, Melbourne, Australia

## Group: Healthcare domain

Paper ID	Authors	Paper Title	Presentation Time
5341	Fernando Jaume-Santero, Boya Zhang, Dimitrios Proios, Anthony Yazdani, Racha Gouareb, Mina Bjelogric and Douglas Teodoro.	Cluster analysis of low-dimensional medical concept representations from Electronic Health Records	14:25-14:45
9510	Annelore Jellemijn Pieters and Stefan Schlobach.	Combining Process Mining And Time Series Forecasting To Predict Hospital Bed Occupancy	14:45-15:05
2770	Xinyu Pang, Yong-Feng Ge and Kate Wang.	Genetic Algorithm for Patient Assignment Optimization in Cloud Healthcare System	15:05-15:25
7756	Markian Jaworsky, Xiaohui Tao, Jianming Yong, Lei Pan, Ji Zhang and Shiva Pokhrel.	Automated Knowledge Graph Construction for Healthcare Domain	15:25-15:45

## Conference Opening (Day 2)

### **Time:**

The conference will be run in Biarritz, France Time.

Biarritz, France Time Zone:

<https://www.timeanddate.com/worldclock/france/biarritz>

**ZOOM ID: 838 5112 0081**

**Passcode: 603185**

**Zoom link:**

<https://victoriauniversity.zoom.us/j/83851120081?pwd=Nzk0cFZ2REJXTIBuQS9ySkTES0ZGQT09>

**Keynote session Chair:** Dr Kate Wang, RMIT University, Australia

### **Keynote Speech 2:**

Time: 8:00-9:00 am (including 10 min ques.& Ans.), Saturday 29<sup>th</sup> October 2022 (Day 2)

**Speaker:** Prof. Yunpeng Cai, Guandong Engineering Center & Shenzhen Engineering Lab for Health Big Data Analysis.

Title: **“Explainable Knowledge Acquisition for Medical AI Models with a Global Generative Approach”**

**Tea break**

Time: 9:00-9:15 am, Saturday 29<sup>th</sup> October 2022 (Day 2)

**Session 1 (day 2): [20min presentation each (15 min presentation and 5min Question & answer)]**

Time: 9:15-10:45 am, Saturday 29<sup>th</sup> October 2022 (Day 2)

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

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

Paper ID	Authors	Paper Title	Presentation Time
3304	Rand Ameen Azeez, Sarmad Alkhafaji, Mohammed Diykh and Shahab Abdulla.	ECG Signals Classification Model Based on Frequency domain Features Coupled with Least Square Support Vector Machine (LS-SVM)	9:15-9:25
2222	Muhammad Tariq Sadiq, Hesam Akbari, Siuly Siuly, Yan Li and Peng Wen.	Fractional Fourier Transform Aided Computerized Framework for Alcoholism Identification in EEG	9:25-9:45
6069	Ashik Mostafa Alvi, Siuly Siuly, Maria Cristina De Cola and Hua Wang.	DRAM-Net: A Deep Residual Alzheimer’s Diseases and Mild Cognitive Impairment Detection Network Using EEG Data	9:45-10:05
7448	Shahab Abdulla, Mohammed Diykh, Sarmad Alkhafaji, and Atheer Y. Oudah.	An Intelligence Model for Blood Pressure Estimation from Photoplethysmography Signal	10:05-10:25
6873	Supriya Supriya, Tony Jan, Nandini Sidnal and Scott Thompson-Whiteside.	Alcoholic EEG Data Classification Using Weighted Graph Based Technique	10:25-10:45

## Lunch Break

Time: 10:45-11:15 am, Saturday 29<sup>th</sup> October 2022 (Day 2)

## **Session 2 (day 2): [20min presentation each (15 min presentation and 5min Question & answer)]**

Time: 11.15 am-12:55 pm, Saturday 29<sup>th</sup> October 2022 (Day 2)

**Session Chair:** Dr Jiao Yin, Victoria University, Australia

### **Group: Modelling in Public Health data**

Paper ID	Authors	Paper Title	Presentation Time
3365	Umme Marzia Haque, Enamul Kabir and Rasheda Khanam.	Detection of obsessive-compulsive disorder in Australian children and adolescents using machine learning methods	11:15-11:35
9551	Zecheng Yin and Yanchun Zhang.	HGCL: Heterogeneous Graph Contrastive Learning for Traditional Chinese Medicine Prescription Generation	11:35-11:55
9960	Chengcheng Fu, Zhisheng Huang, Frank van Harmelen, Xingpeng Jiang and Tingting He.	Food recommendation for mental health by using knowledge graph approach	11:55-12:15
8964	Jitao Yang.	Tailored Nutrition Service to Reduce the Risk of Chronic Diseases	12:15-12:35
5648	Sandro Luis Freire de Castro Silva, Rodrigo Santos and Marcelo Fornazin.	Towards a Perspective to Analyze Emergent Sytems in the Health Domain	12:35-12:55

## **Tea break:**

Time: 12.55-13:10 pm, Saturday 29<sup>th</sup> October 2022 (Day 2)

## **Session 3 (day 2): [20min presentation each (15 min presentation and 5min Question & answer)]**

Time: 13.10-15:10 pm, Saturday 29<sup>th</sup> October 2022 (Day 2)

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

## Group: Research in Artificial Intelligence area

Paper ID	Authors	Paper Title	Presentation Time
2044	Longyin Guo, Lin Xia, Xin Yi Huang, Yu Xin Fu, Xin Yi Li, Si Chen Zhou, Chao Zhao and Bing Xiang Yang.	<a href="#">Aurora: An aUtomatic cRisis balance analysis mOdel based on aRtificial intelligence</a>	13:10-13:30
1629	Xiaoyi Lian, Lina Chen, Xiayan Ji, Fangyao Shen, Hongjie Guo and Hong Gao.	<a href="#">Optical Coherence Tomography Classification based on Transfer Learning and RA-Attention</a>	13:30-13:50
1652	Peng Ren, Xingyue Liu, Shuxin Zheng, Xin Li, Ligong Lu, Xia Wang, Ruoyu Wang and Ming Sheng.	<a href="#">A Hybrid Medical Causal Inference Platform Based on Data Lake</a>	13:50-14:10
1789	Peng Ren, Zhiyuan Tian, Zeyu Wang, Xin Li, Xia Wang, Tao Zhao and Ming Sheng.	<a href="#">An Anomaly Detection Framework Based on Data Lake for Medical Multivariate Time Series</a>	14:10-14:30
2990	Yao Yahong, Lin Shaofu, Huang Zhisheng, Guo Chaohui and Wu Ying.	<a href="#">Research on the Crisis Intervention Strategy Service System</a>	14:30-14:50
7798	Cui Qin, Zheng Wenkui, Hou Wei, Sheng Ming, Ren Peng, Chang Wang and Li Xiangyang.	<a href="#">HoloCleanX: A Multi-source Heterogeneous Data Cleaning Solution Based on Lakehouse Platform</a>	14:50-15.10

## Day 3 (30<sup>th</sup> October 2022)

### **PANEL SESSION:**

### **“New dimensions of Future Health Informatics research”**

Time: 10:00-12:00 pm, Sunday 30<sup>th</sup> October 2022 (Day 3)