

**A report of attending “2<sup>nd</sup> Asia Pacific Conference on  
Medical and Health Science (APCMHS 2019)”**

**Title of Presentation:**

**Medical Image Preprocessing and Convolutional Neural Network  
for Colorectal Cancer Image Classification**

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Country travelled: South Korea

Conference Venue: Tmark Grand Hotel, Myeongdong,

Seoul, South Korea

Travel period: 1- 3/06/2019

1<sup>st</sup> July 2019

## **2<sup>nd</sup> Asia Pacific Conference on Medical and Health Science (APCMHS 2019)**

**June 1-3, 2019.**

**Title: Medical Image Preprocessing and Convolutional Neural Network for Colorectal Cancer Image Classification**

### **Introduction of the conference**

Asia Pacific Conference on Medical and Health Science 2019 (APCMHS 2019) will be the most comprehensive conference focused on the various aspects of Medical Engineering, Medical Physics, Information Technology, Mental Health, Pharmaceutical Sciences and Chemistry. The goal of this conference is to bring together the researchers from academia and industry as well as practitioners to share ideas, problems and solutions relating to the multifaceted aspects of Medical Engineering, Medical Physics, Information Technology, Mental Health, Pharmaceutical Sciences and Chemistry.

APCMHS 2019 is co-sponsored by Asia Pacific Environmental Science Research Center, Hong Kong and Singapore Management and Sports Science Institute, Singapore. APCMHS 2019 is also technically co-sponsored by Technical University of Denmark, Denmark, University of South Africa, South Africa and Tokyo Institute of Technology, Japan.

### **The objectives for participation**

According to the mention of the introduction of APCMHS 2019, this is an expedient conference to share the knowledge from research and study in a different area of medical science problem by the supporting with computer science and engineering method. Thus, the objective of participating in the conference of APCMHS 2019 was to share our research results and knowledge of medical image preprocessing and convolutional neural network for colorectal cancer image classification. And also obtain the information and suggestions from other researchers.

## Process

APCMHS 2019 was three days conference during 1-3 June 2019. The conference event was organized in the Tmark grand Hotel, Myeongdong, Seoul, South Korea with Singapore Management and Sports Science Institute from Singapore is an organizer and invite researchers and student from overseas to join in this conference.

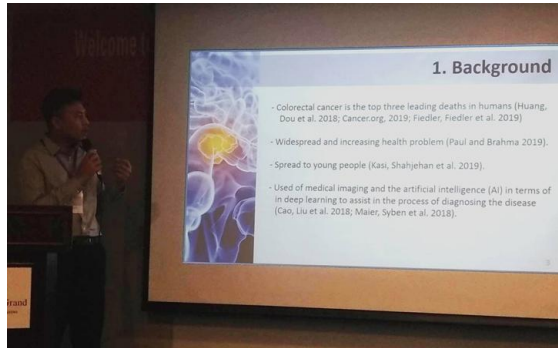
There were 5 different sessions, (1) Pharmaceutical Science and Biomedical, (2) Medical Engineering and Information Technology, (3) Informatics, (4) Mental Health and (5) Education and Communication. I have joined in second sessions of Medical Engineering and Information Technology with the Keynote speaker was Professor Jun Wang is a Chair Professor of Computational Intelligence in the Department of Computer Science at City University of Hong Kong. He provided key insight into the area of artificial intelligence regarding collaborative neurodynamic optimization approach by employing a population of recurrent neural networks (RNNs) at lower level and particle swarm optimization (PSO) with wavelet mutation at the upper level. And the experimental results substantiate the efficacy and superiority of the collaborative neurodynamic optimization approach to bound-constrained global optimization with several benchmark nonconvex functions and clustering with benchmark dataset in comparison to the state-of-the-art algorithms

The key agendas of APCMHS 2019 were, welcome Socializing event, Keynote speech, oral presentation, and poster presentation. The welcome socializing event was the opportunities to share the knowledge and method in computer science with other researchers and education as well. I have participated in all the three days events from 1-3 June 2019. I present my research result, technique and knowledge of medical image preprocessing and convolutional neural network for colorectal cancer image classification on 2th June 2019. For 15 minutes in an oral presentation, Q&A of 5 minutes. Some researchers had the question viz. 1) Could you explain more regarding another method for image preprocessing? 2) This method can be used in the real life of medical working right? 3) The convolutional neural network can apply to other organs or not?

**Experience and Suggestions:**

There were up to 30 research papers were presented at the conference, most participant researchers come from Japan, Korea, China, Singapore, Taiwan, Hong Kong, Philippines, Thailand, and India. The conferences can a nice handle the time for presentation including questions and answers. Participants feel free with sharing knowledge and discussion.

## Photo for Conference activities



Paper ID: APCMHS 2019 E399



Singapore  
Management and  
Sports Science  
Institute

## Oral Presentation Certificate

**2019 2nd Asia Pacific Conference on Medical and Health Science  
(APCMHS 2019)**

**APCMHS-METS 2019, IWBB 2019 and  
ICMHET 2019 are co-held with APCMHS 2019**

June 1-3, 2019, Seoul, South Korea

We are delighted to declare the paper

Medical Image Preprocessing and Convolutional Neural Network for Colorectal  
Cancer Image Classification

written by Natinai Jinsakul and Cheng-Fa Tsai

has met the high standard of requirements from our Committee.

This is to certify your efforts and excellent presentation.

Organizing Committee

