

ICFHR2020 Competition on

Short answer ASsessment and

Thai student SIGnature and Name COMponents
Recognition and Verification (SASIGCOM)





Call for Participation

Short Answer, Thai Student Signature and Name Component Datasets

Thai Student Signatures Samples				
Lupure	W. Descons	1 20 Nova	6. Nevarum	
Canuina No	Genuine Name Components Fo		orged Name Components	
First Name	Last Name	First Name	Last Name	
		-	~	
กานตัสใน	าเราาโด	กษยุสูง	ભૂજગાદિત	
ชนน้ำหนัส	เครื่อปั่นแกว	ชนส์มนัส	หมือป้นแกง	
Handwritten Word Sample 1 Handwritten Word Sample 2 Handwritten Word Sample 3 WORNWAY Programmy Programmy Programmy				
)	17,09	na marg	
Information	7 Informal	Lieva INF	ormation	
language	3 languan	ges 20	nguages	
data Da	sc Tatala	se Dai	Database	
Lazer	Peise	- has	305	

Important Dates

Competition Phases	Date	
Site Open	Jan 12, 2020	
Registration	Feb 15,	
Open	2020	
Datasets	March	
Obtainment	1, 2020	
Registration and Algorithm Submission Deadline	July 10, 2020	
Results	July 11,	
Announcement	2020	

Organisers



Dr Hemmaphan Suwanwiwat (James Cook University Cairns, Australia)



Dr Abhijit Das (Indian Statistical Institute, Kolkata, India)



Prof Umapada Pal (Indian Statistical Institute: Kolkata: India)



Prof Michael Blumenstein (University of Technology Sydney, Australia)

About the Competition

Inspired by the overwhelming success of the ICFHR2018 competition on Thai Student Signature and Name Components Recognition and Verification (TSNCRV 2018) we are proposing another novel competition on Short answer ASsessment and Thai student SIGnature and Name COMponents Recognition and Verification in conjunction with ICFHR 2020 (ICFHR2020 Competition on SASIGCOM). The proposed competition is aimed to automate the evaluation process short answer-based examination. Such automation can benefit education from, not only the significant time reduction when marking short answer examination papers, but also in being able to identify and verify that a student's signing signature on an exam paper is genuine and is their own.

Incidentally, an answer script from short answer type examination consists of three types of handwritten components, namely, student name and signature, and short (few-word) answers. Hence, the proposed competition contains three components which are short answer assessment - word spotting (recognising and marking the answers to short-answer questions derived from examination papers), student name components (first and last names) and signature verification and recognition.

Registration

The competition registration can be done by email. If you would like to register for the competition, please send an email to Abhijit and Hemmaphan at

<u>abhijit.das@griffithuni.edu.au</u> and <u>art.suwanwiwat@jcu.edu.au</u> with a subject line: "ICFHR2020 Competition Registration", your email should contain the following information: name, affiliation, phone number, and email address.

Participant Tasks

There will be six tasks, being:

Short Answer Datasets:

 $\ensuremath{\mathbb{L}}$ - $\ensuremath{\mathbb{C}}$. Word spotting for marking cursive and or printed handwritten short answers

Thai Student Name Components:

- Student identification (employing handwritten first and last names).
- 4. Student verification process employing Thai student name components (handwritten first and last names).

Thai Student Signatures:

- 5. Student identification (employing student signatures).
- 5. Student verification process employing Thai student name components (student signatures).

Results and program files submission

Each participant can participate in any number of the tasks, then provide (email) their submission, which can be any program or executable files that can read images from a directory (one for training and other for test), to the organisers via email (abhijit.das@griffithuni.edu.au and art.suwanwiwat@jcu.edu.au) with a subject line: "ICFHR2020 Competition Submission".

Evaluation

The evaluation will be performed using the program files sent by the participants via email to the organisers. Evaluation will be performed using performance accuracy and Equal Error Rate as the performance measures. An average of both the measure will be considered for ranking the submissions.

Website: http://sasigcomp2020.chefitup.club/art.suwanwiwat/