# PRESENTATION IINAE2024 Nov 2024

IINAE2024: The 6th Workshop on Innovation Initiatives in NLP/AI/Education
Co-located with The 19th International Joint Symposium on Artificial Intelligence
and Natural Language Processing (iSAI-NLP-AIoT 2024)
The Zign Hotel Pattaya, Chonburi, Thailand

https://thaidlt.com/isai2024-workshop/

\_\_\_\_\_

### TITLE:

**"SUTTON SIGNWRITING 2020-2050:** 

BRINGING TOGETHER COMMUNITIES OF SOUTHEAST ASIAN SIGN LANGUAGE USERS THROUGH WRITING THEIR SIGN LANGUAGES ONLINE"

by Valerie Sutton

#### **BRIEF BIO:**

Born in New York City in 1951, Valerie Sutton is an American who invented Sutton Movement Writing, a writing system for recording all body movement. Sutton Movement Writing has five sections, including: SignWriting and DanceWriting. For more detailed information about Valerie Sutton,

go to valeriesutton.org or on Wikipedia:

https://en.wikipedia.org/wiki/Valerie\_Sutton

#### **ABSTRACT:**

Sutton SignWriting is 50 years old in 2024. It is an internationally-used writing system for writing the movements of all sign languages. The writing system can be applied to writing any sign language in the world because it writes body movement. There are 40 to 60 countries writing their sign languages using SignWriting. The only requirement is that the writers know their own sign language, and if they know how to sign in their sign language, then they can learn to use the SignWriting symbols to write their sign language. SignWriting can be written by hand, or written by computer. The computer software is constantly

under development. The biggest challenges in 2025-2050 are for the Sutton SignWriting system to establish a world-wide server that can handle all the computer entries made simultaenously by writers around the world. At the moment, in 2024, the best software for creating dictionaries online is called "SignPuddle 2", developed by Steve Slevinski. In this talk, I will teach you how to use SignPuddle 2 for creating a Myanmar Sign Language Dictionary.

#### **ABOUT SIGNWRITING SOFTWARE:**

Sutton SignWriting is 50 years old in 2024. It started in 1974 in Denmark, written by hand, with ink pens, at drafting tables. Then in the 1980s, software started to develop for typing the symbols of SignWriting. The world's first Sign Language Processor, a "word" processor for typing sign languages, called SignWriter Apple //e and Apple //c paved the groundwork for the next program called SignWriter DOS, all developed by Richard Gleaves. So from 1986-1996, 17 countries were provided with specialized software specific for their country, using SignWriter DOS. Then, in 1996, new developments started using JAVA, creating SignWriter JAVA, and there was SignWriter Tiger and SignWriter Python. It was an exciting time of software development. Brazil developed their own software, called SWEdit. SignBank I and SignBank II developed on the Macintosh by Michael Ogawa, creating dictionaries in SignWriting, and the SignBank program was then transferred to FileMaker Pro, further develoed by FileMaker expert Todd Duell. Then, in 2004, Steve Slevinski developed the PUDL program, that later was called SignPuddle. There was a SignPuddle 1 and 2 and 3, which included other programs called SignMaker and SignText. SignMaker became a stand-alone program in 2015, 2017 and 2022. Programmer Yair Rand developed a typewriter for SignWriting articles in Wikipedia, and for typing SignWriting in Google, and Jonathan Duncan developed SignWriter Studio and the SWSW App and other programs. The DELEGS team from Hamburg, Germany developed online tools for teachers. Today, in 2024, there is new software development in the art of animation, and computer language recognition by Amit Moryossof and others. My gratitude to all the wonderful software developers. There are no words to thank them for all they have done and are doing everyday.

I want to also thank Ye Kyaw Thu and his team of students who developed software for typing Myanmar Sign Language. I also want to thank all the presenters at the SignWriting Symposium for presenting 100 presentations from 2014 to 2024. Remarkable people all donating their time to make the world a better place! THANK YOU!

And of course my sincere gratitude to the country of Brazil, and Asian countries, such as Korea, Japan, Myanmar and Thailand for their remarkable contributions. There are so many contributors to SignWriting, that this paper could be just a long list of links to their accomplishments. So for now I want you all to know that there

is much activity online between SouthEast Asian Sign Language Users and this is to be noted. There is an increase of use of SignPuddle 2 dictionaries, for Japan, Korea, and Thailand. I will try to list some of those links at the end of this paper.

Have you ever heard the phrase "we are a victim of our own success"? I searched using AI and this is what I found:

#### Al Overview

"We are a victim of our own success" is an expression that means to have problems as a result of one's success. For example, a school might be a victim of its own success if parents with children who have special needs actively seek it out."

Isn't AI wonderful? That is a great way to describe Sutton SignWriting in the world today. Because what many people may not realize is that SignWriting used to be supported financially by a non-profit organization called the Center for Sutton Movement Writing, which I and my parents founded in 1974, but I was forced to close the Center for Sutton Movement Writing in 2020. So we no longer have any funding for SignWriting or any software development. Steve Slevinski and other programers and developers and interpreters and writers have all gotten other jobs doing other kind of work, because there is no money to support SignWriting.

When I closed the Center for Sutton Movement Writing in 2020, I assumed that people would stop using SignWriting. But just the opposite! It started to spread around the world faster and without the funding it so sorely needed and so we all are donating our time to make sure that everyone still has access to our old SignWriting servers even though we do not have the funds to keep the servers running smoothly.

And then the remarkable story is, that more and more SouthEast Asian signwriters started using SignPuddle 2 to create large sign language dictionaries just recently. The computer system has almost crashed several times because there were so many people trying to enter and save signs in dictionaries simulltaneously, as if our SignWriting servers were as large as Google or Apple -kind of amazing to think that people are so eager to write and to create dictionaries and it is an honor to know that. But we had to ask them to slow down and not add and save so many signs all at one time from so many users. A regimen, a plan, had to be established that only so many users could work at the same time on our servers.

If you visit SignPuddle 2, and click on the flag for Korea, you will see that as of November 1, 2024, there are 42,577 signs in their dictionary! And, sometimes more than 500 entries are added in one day!

### SignPuddle Dictionary for Korean Sign Language

https://www.signbank.org/signpuddle2.0/index.php?ui=1&sgn=78

and the Brazilian Sign Language Dictionary has 54,080 entries:

### Brazilian Sign Language Dictionary

https://www.signbank.org/signpuddle2.0/index.php?ui=12&sgn=46

The reason I mention being "a victim of our own success" is that all of us working with SignWriting respect and admire each other's work but no one has the financial backing to do more than we are doing right now, which means that we need students - students who want to make the world a better place - to help! It is not easy because there are so many programs out there, and it is hard to get them coordinated, but whatever you feel you can do to help we accept!

Ironically, years ago, SignWriting was named a "World Script" by the ISO. Go to: https://en.wikipedia.org/wiki/SignWriting

ISO 15924	Sgnw (095), SignWriting
-----------	-------------------------

Go to this web page and scroll down to find Sgnw. We also thank Michael Everson for establishing SignWriting as a World Script with the ISO.

https://en.wikipedia.org/wiki/ISO\_15924

And when that happened, SignWriting was compared to Hangul, as one of the world's "featural" scripts. So there has been a lot of ties to SouthAsia related to the SignWriting Script.

So now I suggest that I teach you how to create a Myanmar Sign Language Dictionary in SignWriting in SignPuddle 2. To do this, I can share my screen with you all, and show you how to start. Are you ready? Let's start....

And at the end of this paper I will send you a long list of links that may be useful for you.

### **SUTTON MOVEMENT WRITING**

## The five sections are:

## **Sutton SignWriting**

https://www.signwriting.org

## **Sutton DanceWriting**

https://www.dancewriting.org

## **Sutton MimeWriting**

https://www.movementwriting.org/animation/mime/

## **Sutton SportsWriting**

https://www.movementwriting.org/sports/

# **Sutton Movement Writing**

https://www.movementwriting.org

### SIGNWRITING SOFTWARE

## SignPuddle 2 Online:

https://www.signbank.org/signpuddle/

## SignPuddle 2 for Myanmar:

https://signbank.org/signpuddle2.0/index.php?ui=1&sgn=2

## SignPuddle 2 for Brazil:

https://www.signbank.org/signpuddle/index3.html#sgn-BR

## SignMaker 2017

https://www.signbank.org/signmaker.html

## **OTHER important Software**

https://www.signwriting.org/downloads/

# About Steve Slevinski, developer of SignPuddle and SignMaker:

https://steveslevinski.me

### **Chat with Steve on Gitter:**

https://app.gitter.im/#/room/#sutton-signwriting\_community:gitter.im

# SIGNPUDDLE DICTIONARY FILES IN SIGN LANGUAGES FROM ASIAN COUNTRIES

## **VIETNAMESE SIGN LANGUAGE**

https://www.signbank.org/signpuddle2.0/index.php?ui=1&sqn=153

## **TAIWAN SIGN LANGUAGE**

https://www.signbank.org/signpuddle2.0/index.php?ui=1&sgn=75

## THAI SIGN LANGUAGE

https://www.signbank.org/signpuddle2.0/index.php?ui=1&sgn=34

## SINGAPORE SIGN LANGUAGE

https://signbank.org/sp20/index.php?ui=1&sgn=11

### MALAYSIAN SIGN LANGUAGE

https://www.signbank.org/signpuddle2.0/index.php?ui=1&sgn=66

### **MYANMAR SIGN LANGUAGE**

https://signbank.org/signpuddle2.0/index.php?ui=1&sgn=2

### **KOREAN SIGN LANGUAGE**

https://www.signbank.org/signpuddle2.0/index.php?ui=1&sgn=78

### JAPANESE SIGN LANGUAGE

https://www.signbank.org/signpuddle2.0/latest.php?total=9

### HONG KONG SIGN LANGUAGE

https://www.signbank.org/signpuddle2.0/index.php?ui=1&sgn=12

### HONG KONG SIGN LANGUAGE LITERATURE

https://www.signbank.org/signpuddle2.0/index.php?ui=1&sgn=13

VISIT THE SIGNWRITING SYMPOSIUM

https://www.signwriting.org/symposium/

**SEE 100 SIGNWRITING PRESENTATIONS:** 

# SOME PRESENTATIONS ON SIGNWRITING FROM ASIAN COUNTRIES

2018

"Two Fingerspelling Keyboard Layouts for Myanmar Sign Language with Myanmar SignWriting"

by Hlaing Myat Nwe, Ye Kyaw Thu, Hnin Wai Wai Hlaing, Swe Zin Moe, Ni Htwe Aung, Hnin Aye Thant and Nandar Win Min

https://www.signwriting.org/symposium/presentation0072.html

### 2024

"MovementWriting for Cultural Heritage Preservation" by Sutthikhun Phaengphongsai, Thailand https://www.signwriting.org/symposium/ presentation0081.html

"Two Systems of FSC: featural syllabographic characters" by Jongtae Kim, South Korea https://www.signwriting.org/symposium/ presentation0096.html

### JOIN THE SIGNWRITING LIST

## Join the SignWriting List:

https://listserv.linguistlist.org/cgi-bin/mailman/listinfo/

sw-l

# **SignWriting List Archives**

https://www.signwriting.org/forums/swlist

## **SIGNWRITING ON FACEBOOK:**

## Val's SignWriting Facebook Page

https://www.facebook.com/SignWriting

or

# **SignWriting Discussion Group on Facebook**

https://www.facebook.com/groups/SuttonSignWriting

\_\_\_\_\_



Val ;-)

## **Valerie Sutton**

sutton@signwriting.org