



**Research Laboratory of Technologies of Information  
and Communication & Electrical Engineering  
(LaTICE)**

# **MemoSign Game: A learning Game for Deaf Learners**

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**The second SignWriting Symposium, LaJolla, USA, 21-14 July, 2015**



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- EXPERIMENTATION
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# INTRODUCTION



Sign language is an integral part and an identifying feature of membership in the Deaf Culture

According to WFD, there are about 70 million deaf people who use sign language as their first language or mother tongue.

For deaf and hard hearing people, learning any spoken language is not a natural or automatic process, it is rather a long and intensive task.

Around 80% of deaf people worldwide lack education or are undereducated, are illiterate or semi-literate



# INTRODUCTION



Having a means to represent their own language would bring to these signers the same advantage that writing systems for spoken languages bring to speakers.

The main benefit of having a SL written form is that Deaf signers could :

- Express, share, and record their ideas and thoughts on paper without translating it all the time.
- Learn new things and skills outside of oral communication.
- Improve their ability to comprehend and acquire the written versions of oral language.
- .....



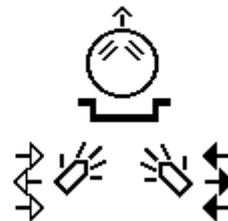
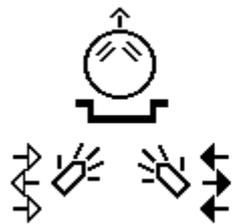
# INTRODUCTION



SignWriting is one of the best known writing systems for SL.

- It uses a set of highly iconic symbols that can be combined to describe any sign
- It is conceived to be used in writing sign languages for the same purposes hearing people commonly use written oral languages.
- It is now used in more than ten countries to aid literacy.

A training to let  
for novice users  
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# CONTRIBUTION



The use of ICT, especially 3D signing avatars, has been identified as a successful practice that can support the teaching of literacy to students who are deaf or hard of hearing.

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# CONTENT



INTRODUCTION



RELATED WORKS



LEARNING VERSION OF MEMORY MATCH  
GAME FOR DEAF LEARNERS



EXPERIMENTATION

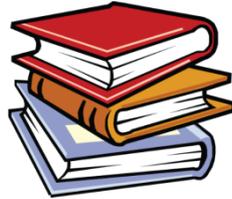


CONCLUSION

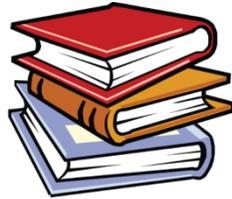




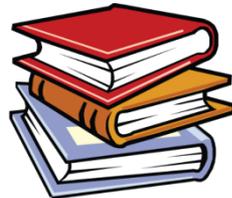
# RELATED WORKS



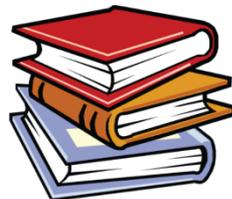
Teaching English language



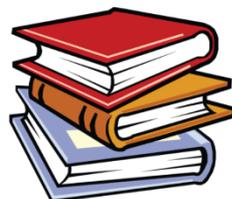
Teaching English language



Responding to questions about the programming languages



Determining the precedence relationship between activities



Teaching introduction to programming language



# CONTENT



INTRODUCTION



RELATED WORKS



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GAME FOR DEAF LEARNERS



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# LEARNING VERSION OF MEMORY MATCH GAME FOR DEAF LEARNERS



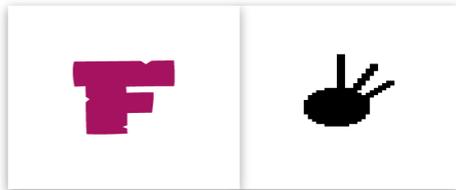
## Memory Match Game



Is a card game in which all of the cards are laid face down on a surface. The objective of the game is to turn over pairs of matching cards with the least possible trials.

## Learning version of Memory Match Game for Deaf Learners

1)



2)



3)



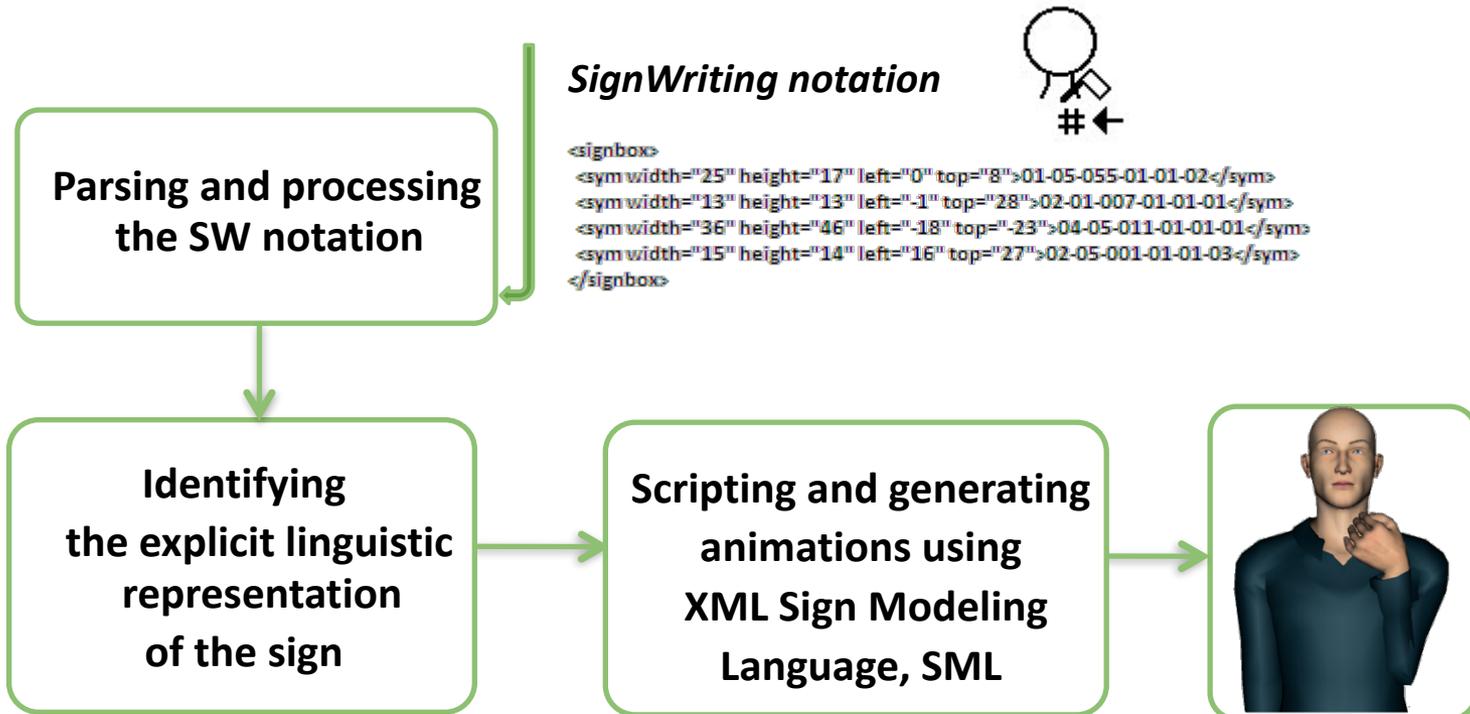


# LEARNING VERSION OF MEMORY MATCH GAME FOR DEAF LEARNERS



## ❑ The avatar-based system tuniSigner

The virtual avatar is driven by an animation software called tuniSigner. tuniSigner was conceived to automatically interpret the exact gestures represented within SignWriting notations.





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INTRODUCTION



RELATED WORKS



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EXPERIMENTATION

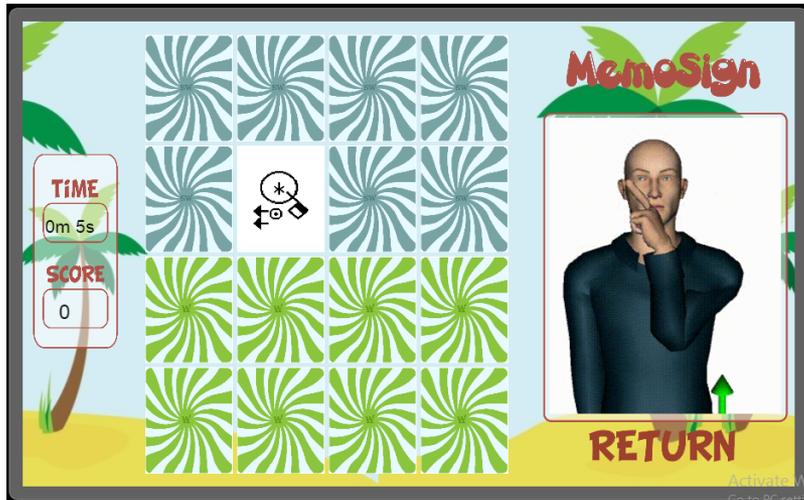


CONCLUSION





# CONCLUSION



A new educational game for deaf learners,

To foster vocabulary acquisition for DL in both spoken and sign languages.

To render the learning experience with more fun.

To engage DL and to keep them motivated.

Futures works will study the impact of this learning game on level of knowledge.



**Thank You for your Attention !**

