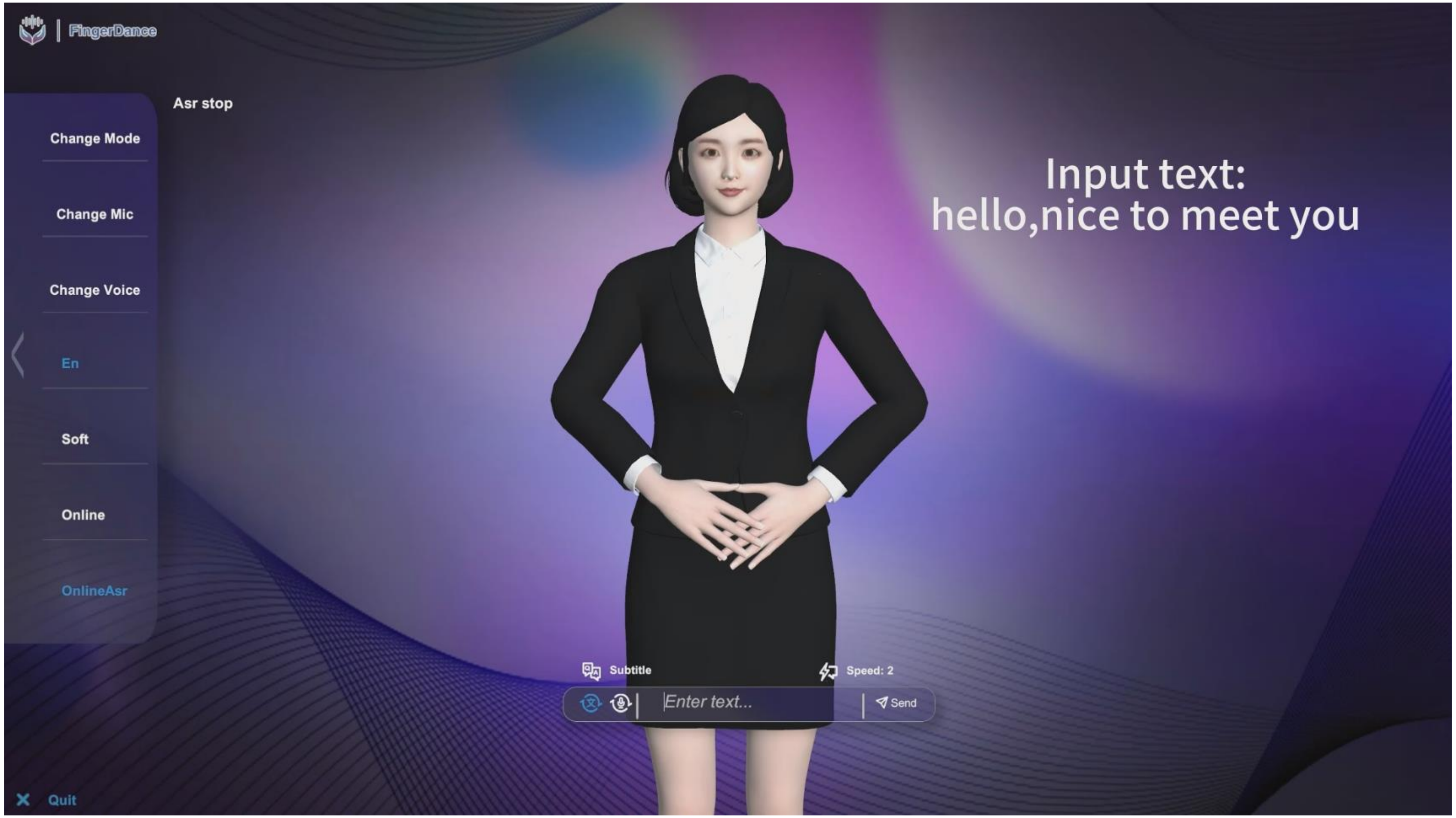
Sign Language Avatar

- **Function: Translating audio and text into sign language videos**
- **Implementation: Using LLM to reorder the text and combining words into video**

Click the image to go to the YouTube video (https://youtu.be/sbASqB8-GnE)



Asr stop

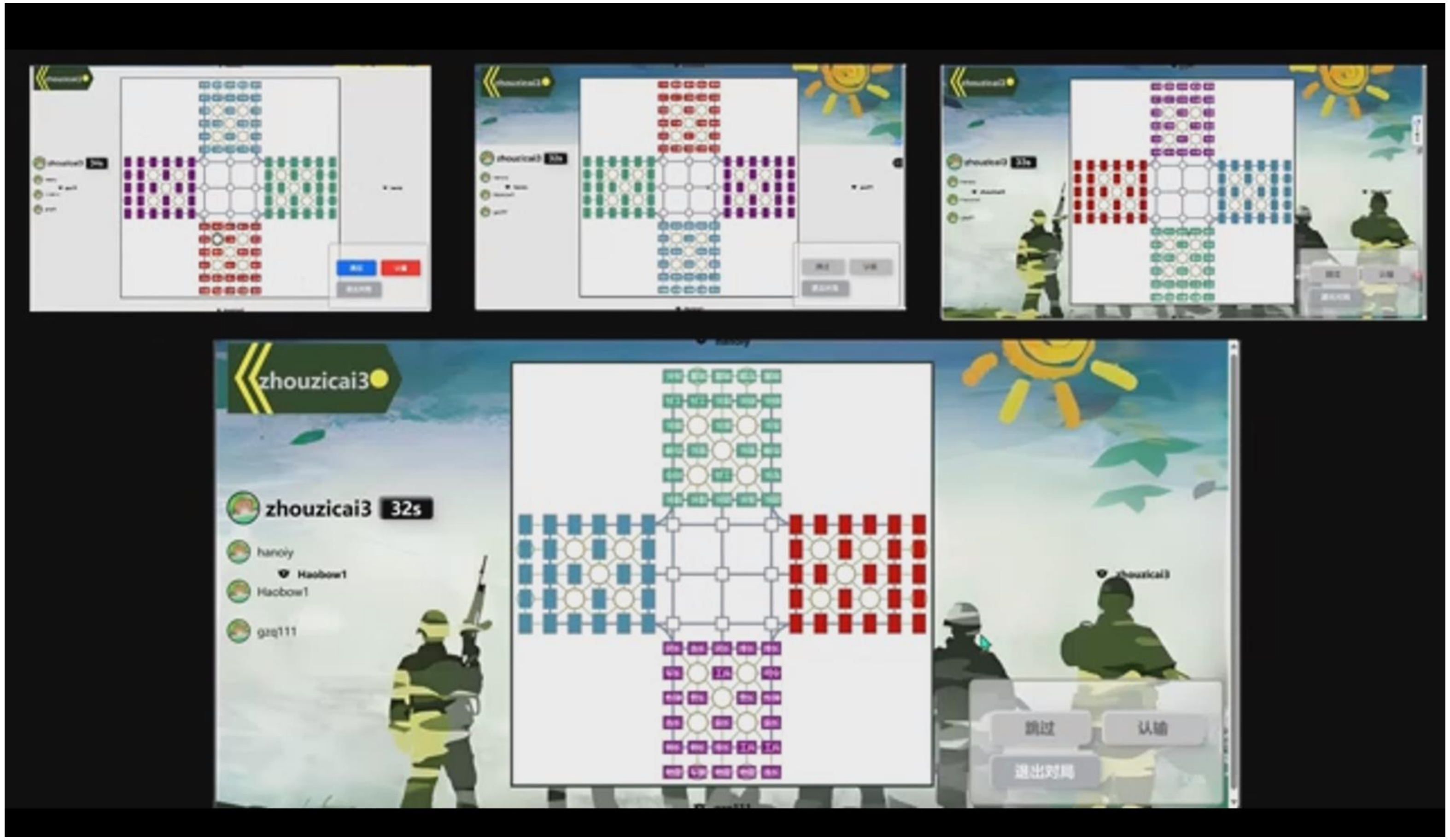
Input text:
hello,nice to meet you

Speed: 2

Four Country Military Chess

- Function: Four players play chess online
- Implementation: Using JavaScript to enforce the game rules, display game interface

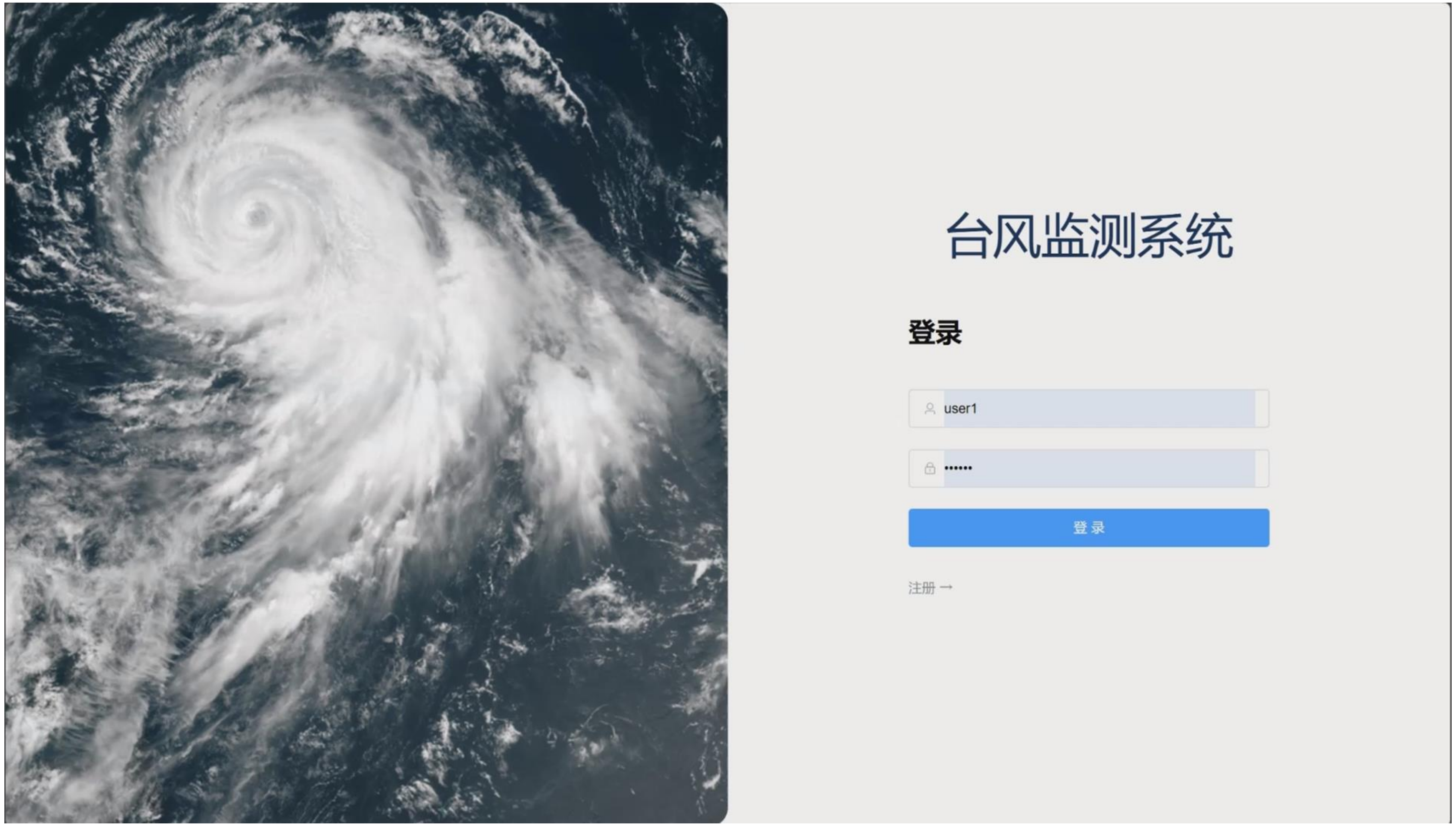
Click the image to go to the YouTube video (https://youtu.be/qpswkVIAR0g)



Typhoon monitoring system

- **Function: Display historical typhoon information and query typhoon in real time**
- **Implementation: Through Vue+Springboot+Mysql to achieve the front and back end**

Click the image to go to the YouTube video (https://youtu.be/PAmsHIV8xQ0)



台风监测系统

登录

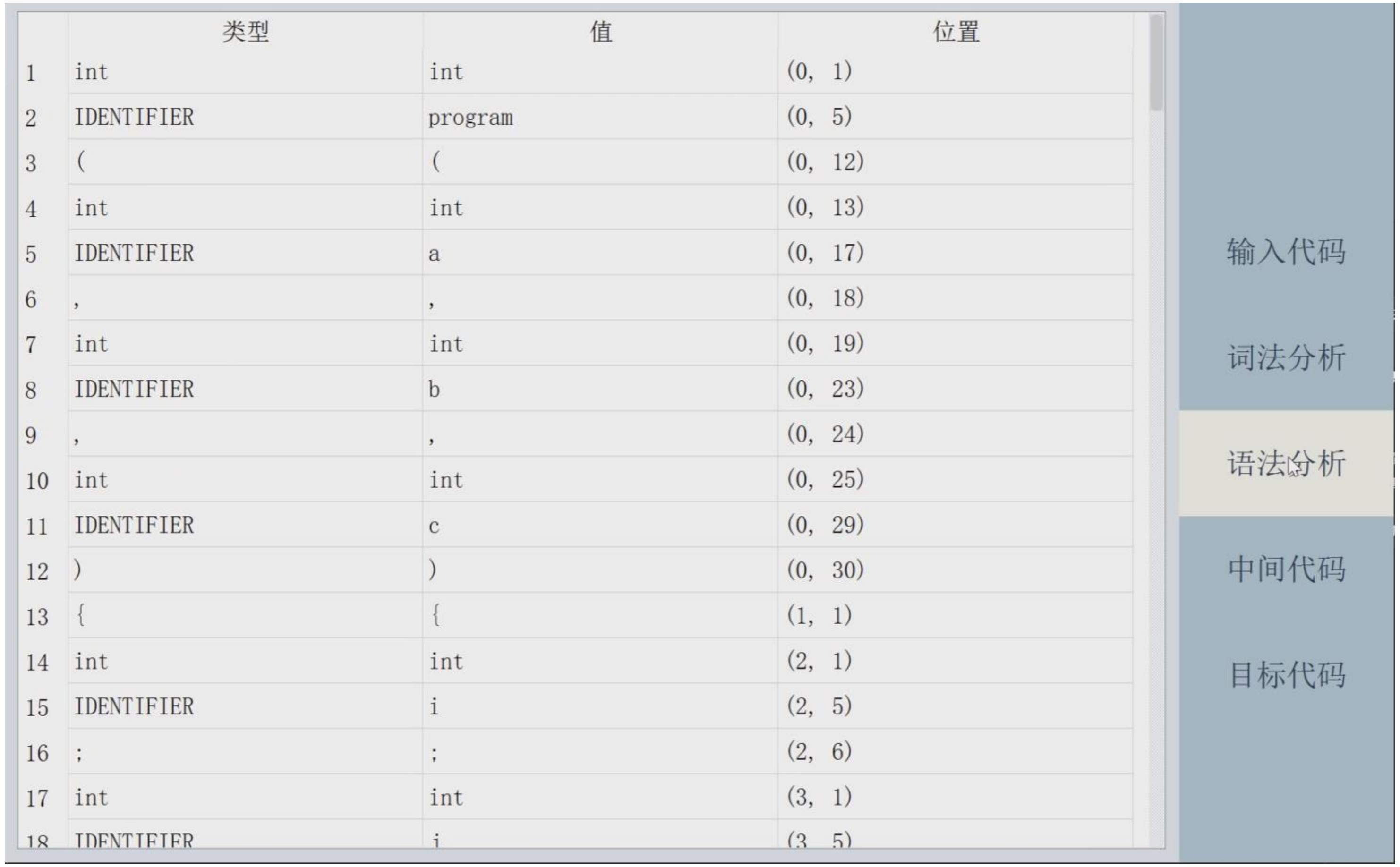
user1

••••••

C-like language compiler

- **Function: A compiler for C-like languages**
- **Implementation: Using Python to implement Lexical analysis and Syntax analysis**

Click the image to go to the YouTube video (https://youtu.be/j-0mRrpPSAA)

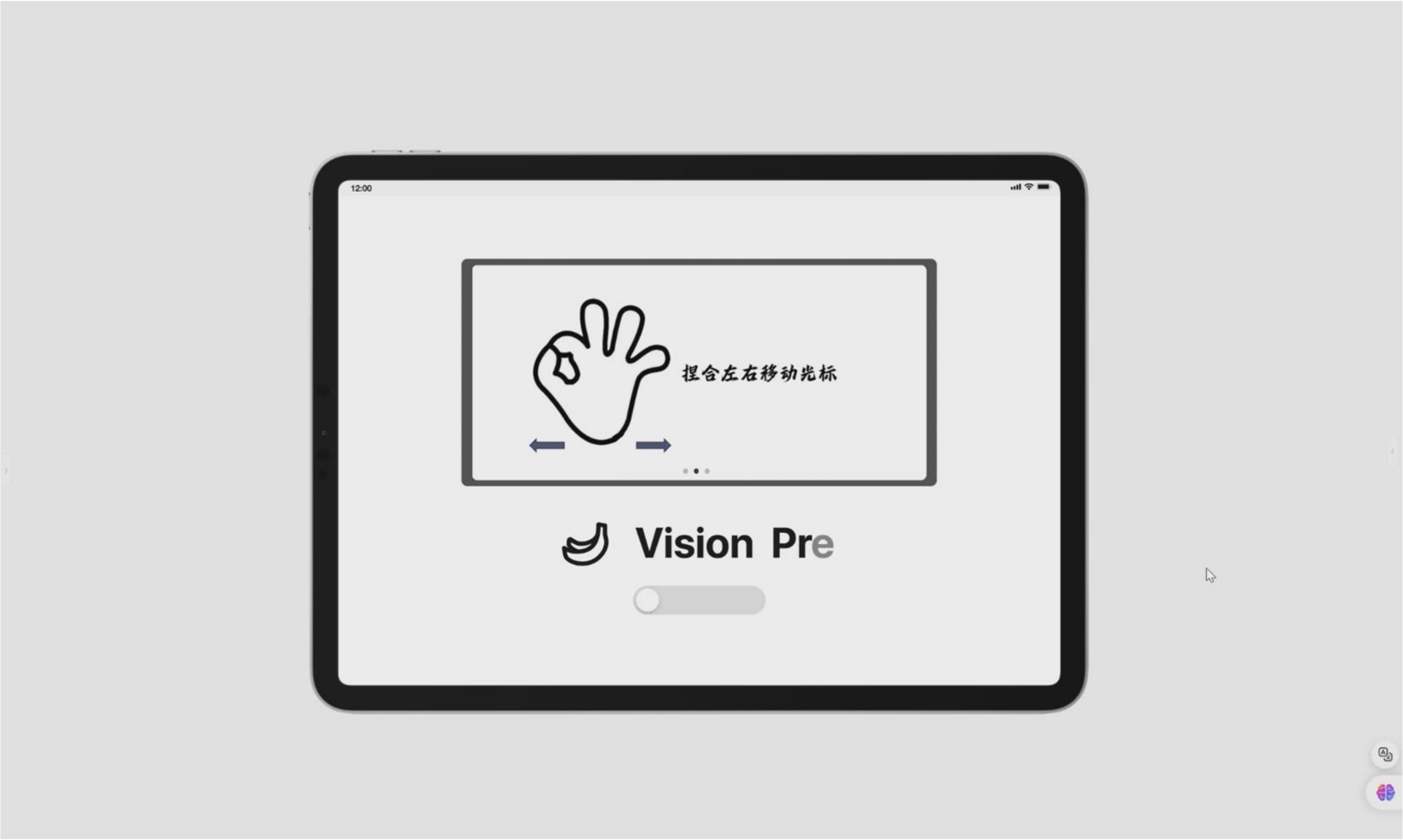


	类型	值	位置
1	int	int	(0, 1)
2	IDENTIFIER	program	(0, 5)
3	(	(	(0, 12)
4	int	int	(0, 13)
5	IDENTIFIER	a	(0, 17)
6	,	,	(0, 18)
7	int	int	(0, 19)
8	IDENTIFIER	b	(0, 23)
9	,	,	(0, 24)
10	int	int	(0, 25)
11	IDENTIFIER	c	(0, 29)
12	)	)	(0, 30)
13	{	{	(1, 1)
14	int	int	(2, 1)
15	IDENTIFIER	i	(2, 5)
16	;	;	(2, 6)
17	int	int	(3, 1)
18	IDENTIFIER	i	(3, 5)

Gesture control system

- **Function: Using gesture to control operating system**
- **Implementation: Using Python and JavaScript to implement algorithms and layout**

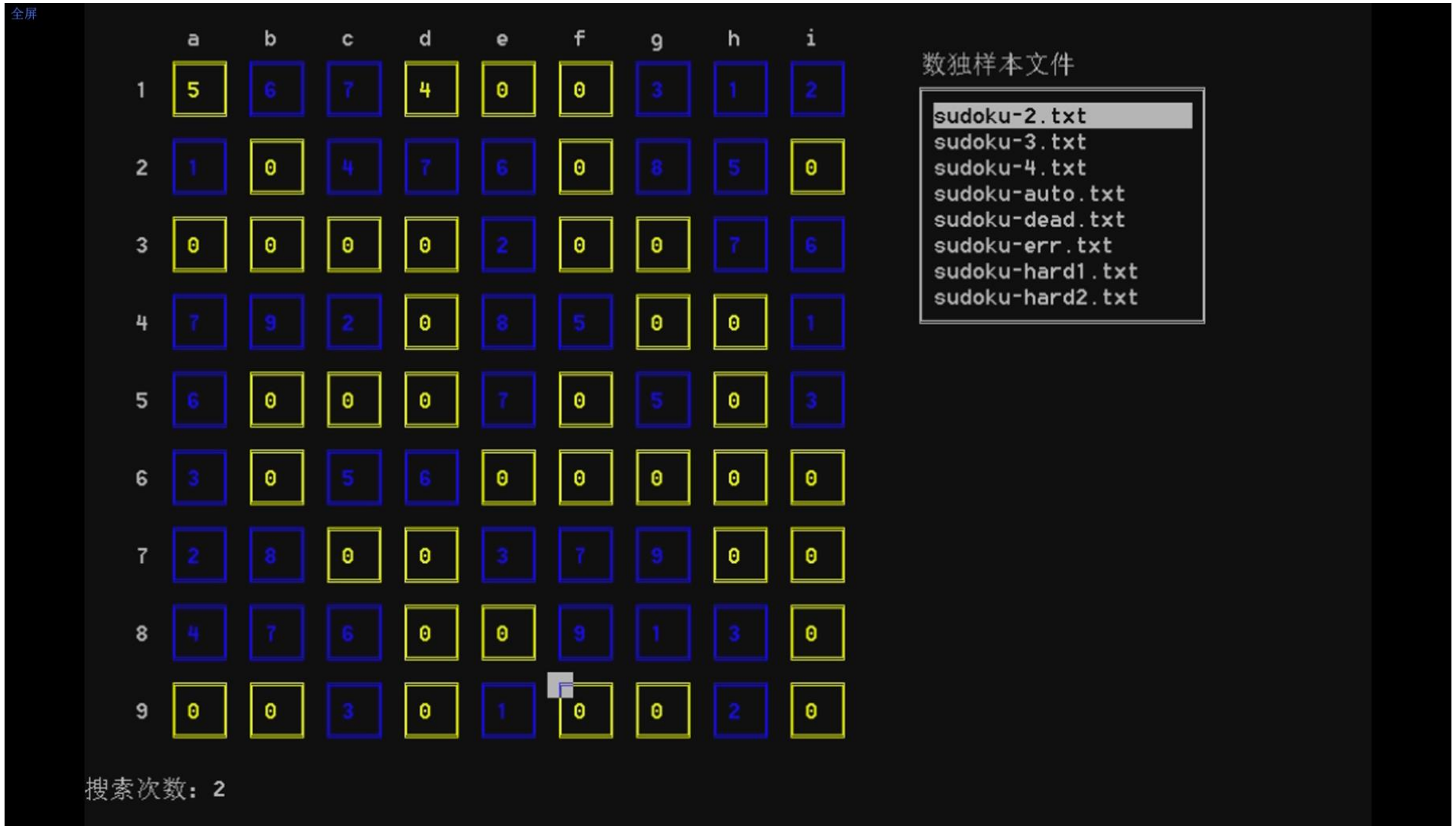
Click the image to go to the YouTube video (https://youtu.be/06cWRosGIJM)



Sudoku

- **Function: Automatic sudoku solution**
- **Implementation: Using C++ to Display Sudoku interface and design auto solution**

Click the image to go to the YouTube video (https://youtu.be/cVn1qhCFmJM)



	a	b	c	d	e	f	g	h	i
1	5	6	7	4	0	0	3	1	2
2	1	0	4	7	6	0	8	5	0
3	0	0	0	0	2	0	0	7	6
4	7	9	2	0	8	5	0	0	1
5	6	0	0	0	7	0	5	0	3
6	3	0	5	6	0	0	0	0	0
7	2	8	0	0	3	7	9	0	0
8	4	7	6	0	0	9	1	3	0
9	0	0	3	0	1	0	0	2	0

搜索次数：2

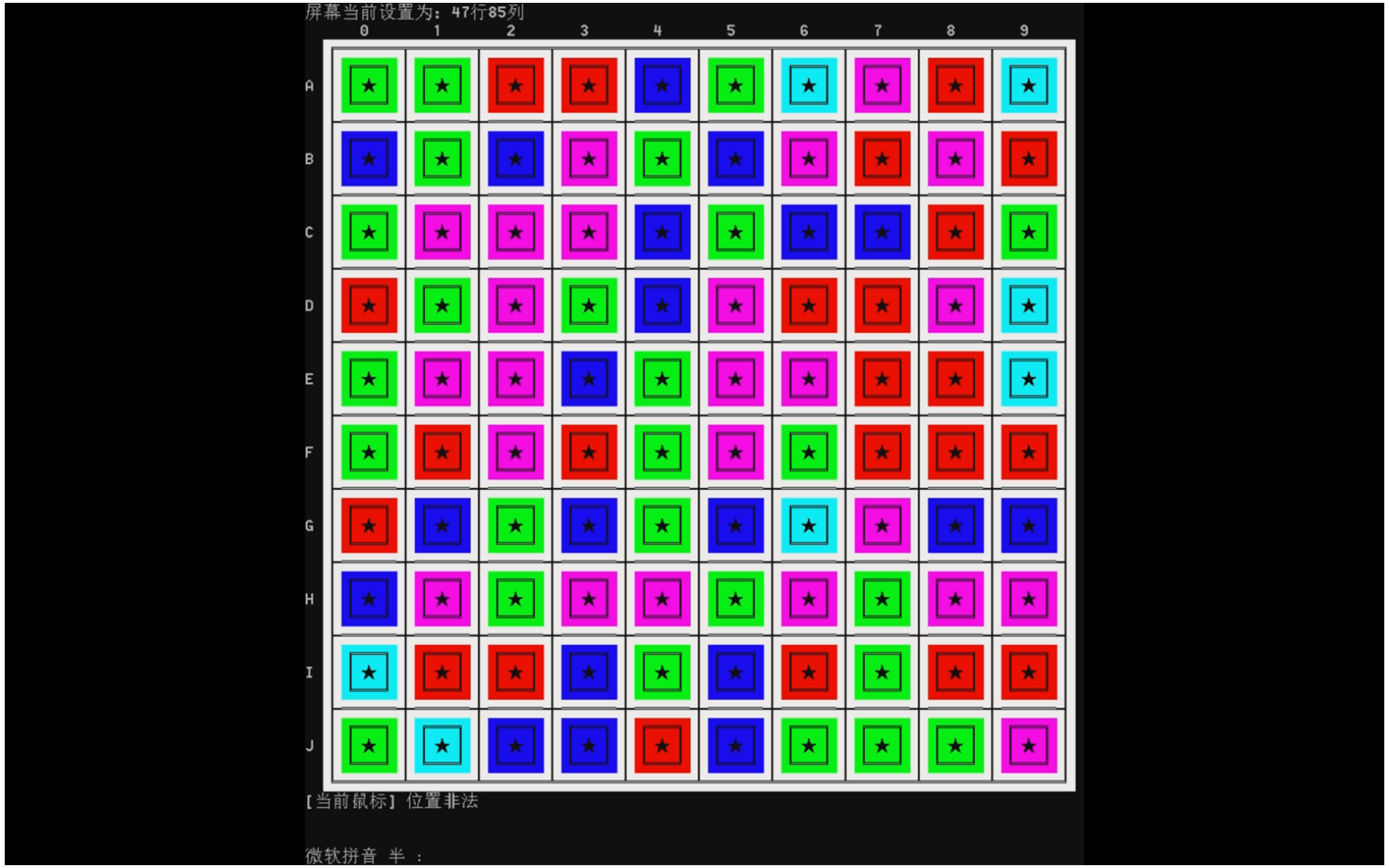
数独样本文件

```
sudoku-2.txt
sudoku-3.txt
sudoku-4.txt
sudoku-auto.txt
sudoku-dead.txt
sudoku-err.txt
sudoku-hard1.txt
sudoku-hard2.txt
```

Killing the Stars

- **Function: The goal of the game is to kill all the stars**
- **Implementation: Using C++ to Display interface and design game rules**

Click the image to go to the YouTube video (https://youtube.com/shorts/80frr-D360A)



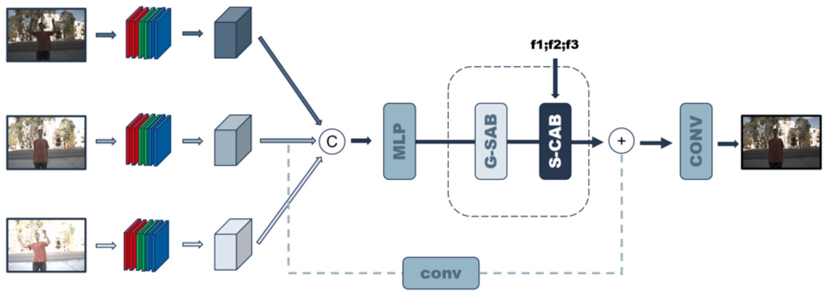
```
屏幕当前设置为：47行85列
   0  1  2  3  4  5  6  7  8  9
A  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
B  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
C  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
D  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
E  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
F  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
G  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
H  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
I  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
J  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★
[当前鼠标] 位置非法

微软拼音 半 ：
```

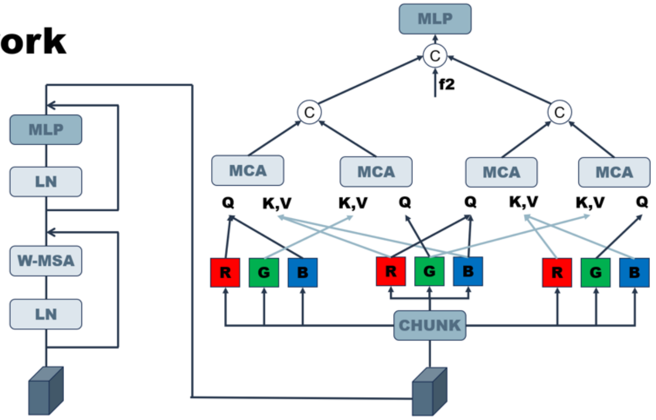
HDR Reconstruction

- **Function: Using cross-attention framework to improve HDR reconstruction**
- **Implementation: Using Python to implement framework**

framework

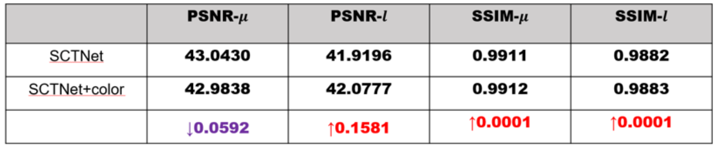


framework



result

result

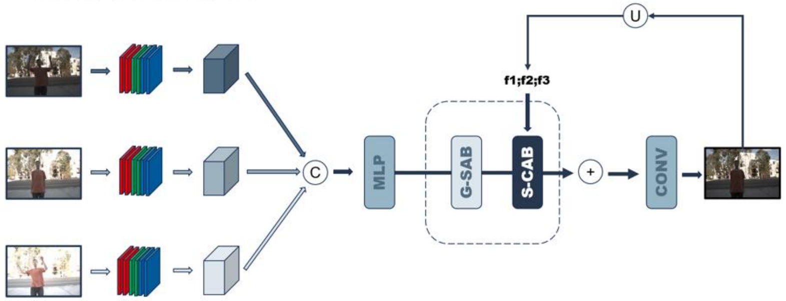


	PSNR-μ	PSNR-l	SSIM-μ	SSIM-l
SCTNet	43.0430	41.9196	0.9911	0.9882
SCTNet+color	42.9838	42.0777	0.9912	0.9883
	↓0.0592	↑0.1581	↑0.0001	↑0.0001

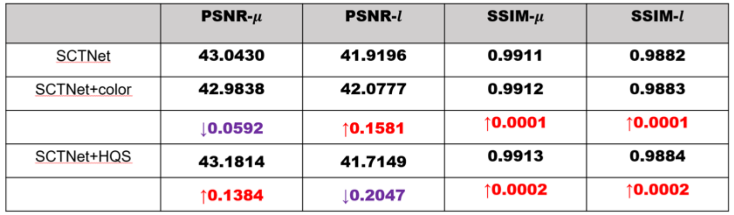
HDR Reconstruction

- **Function: Using HQS to improve HDR reconstruction**
- **Implementation: Using Python to implement framework**

framework



result



	PSNR-μ	PSNR-l	SSIM-μ	SSIM-l
SCTNet	43.0430	41.9196	0.9911	0.9882
SCTNet+color	42.9838	42.0777	0.9912	0.9883
	↓0.0592	↑0.1581	↑0.0001	↑0.0001
SCTNet+HQS	43.1814	41.7149	0.9913	0.9884
	↑0.1384	↓0.2047	↑0.0002	↑0.0002

result

SCTNet color HQS GT

SCTNet color HQS GT

SCTNet color HQS GT

SCTNet color HQS GT

SCTNet color HQS GT

SCTNet color HQS GT