

# Windows User Emulator

Increase reliability and reduce testing time!

V Singh

Records windows user movement and  
execute later

Lua script extension for automating  
the Windows GUI simulates  
keystrokes, mouse movement.

This framework creates initial lua  
script from user's interaction.

# Scalable Windows User Emulator

Records windows user movement and  
execute later

Presenter :-)

V Singh

# Agenda

Please follow following slides about How it works!

How to create simple user emulator






Download following zip file (No spyware  
GCC compiled C++)

Ubuntu32/64 Raspberry PI also available

[https://github.com/natashaiwscope/win\\_useremulator/tree/master/windows/windowsuseremu.exe](https://github.com/natashaiwscope/win_useremulator/tree/master/windows/windowsuseremu.exe)

# GUI First Look

untitled.txt — Application Example

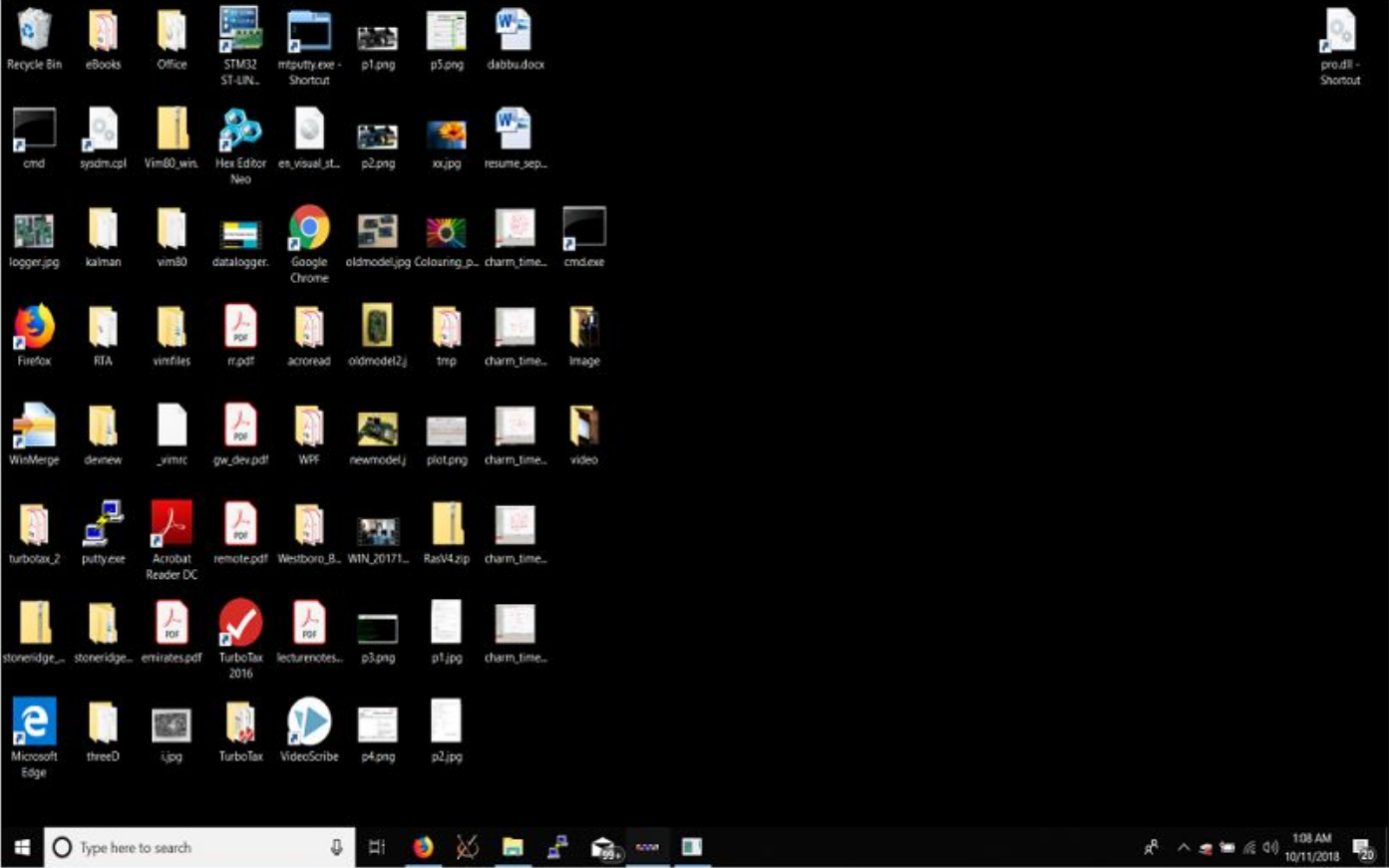
 **NONE** 192.168.0.6 D    

WinFrame "Edit" autoexec.lua "lua"

**Play** DEL CTRL  
**Record** ALT ENTER

TP1 TP2 TP3 TP4


Templ Save  
tpSize Template Create  
32



Type here to search

10:08 AM 10/11/2018

**Single Left Click 0 0** **KEYBRD TX1**

**NONE**  
browse bat  
Template Mode

# Standard Windows/Web Testing

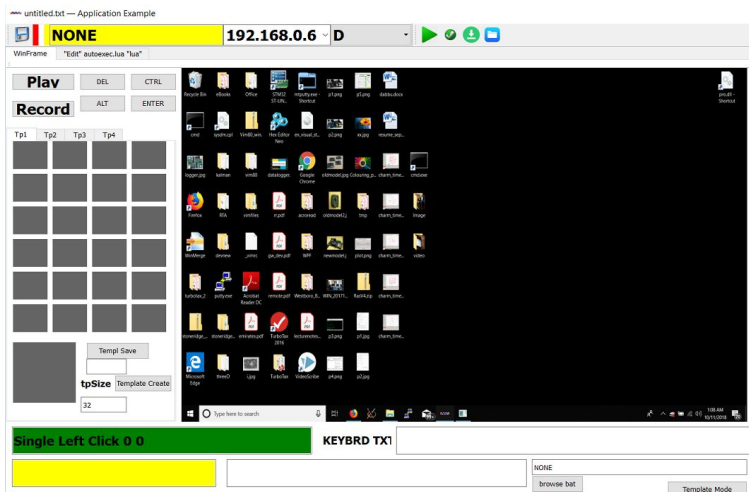
**winRunner.exe**



**Automatic testing for GUI**

**LAN/Automatic Discovery**

**remote\_pc.exe**



# GUI First Look

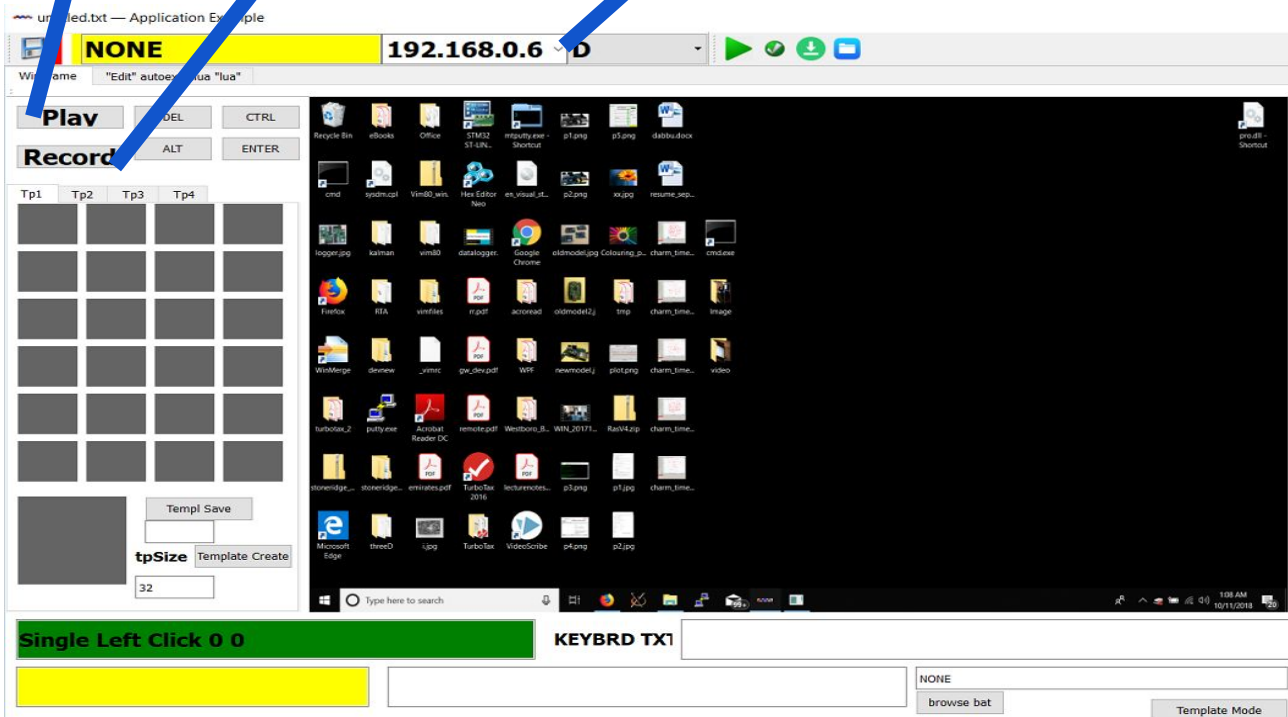
Play

Record

Automatic Discovery of  
client Desktop

Records HID  
Mouse/Keyboard Event  
with timing

(Creates Lua  
Script, may  
be edited by  
user later )



# Super simple procedure to create automatic testing

1. Unzip maser.zip from GITHUB repository.
2. Start Server Application on remote machine  
(winRunner.exe)
3. Start Client Application on Different PC on same network  
(remote\_pc.exe)
4. Wait until system discovers IP Address of Remote PC
5. Click on Record button
6. Right/Left Mouse Click like starting Firefox/Web/App as well as Keyboard and see real time on screen. Once complete click Record button again to stop recording.
7. Click on Play button to replay last recorded lua script file.



# **Feature Under Development**

- 1. OCR driven Windows GUI testing.**
- 2. Template image search (Already implemented)**
- 3. OpenCV3.4 Image analysis for fully automated windows testing system.**

# How system discovers Device on network



**Regular Unsolicited UDP  
Broadcast on port 5555  
From Client machine**

**Mouse/Keyboard Events**



**Presenter :-)**

**V Singh**