

# SHOUT: An AI test companion

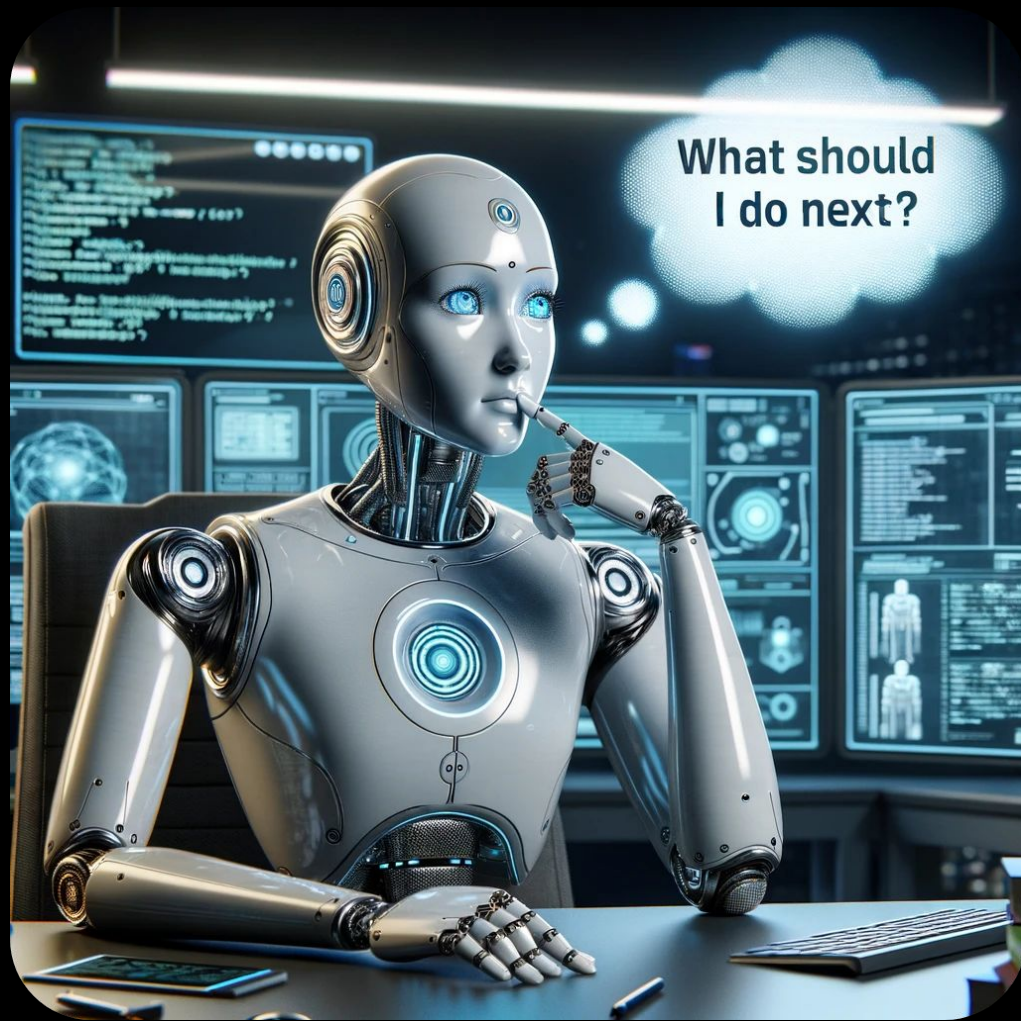
# Challenges of GUI Test Automation

Tests break due to  
app changes

Tests break due to  
timing issues

Requires  
programming  
skills

Cost of manually  
repairing broken  
tests



**AI Agent**

**Brain (LLM)**

**Goal**

**Memory**

**Input (Eyes, Ears)**

**Output (Hands, Mouth)**

# Full Self Testing



# SHOUT: An AI test companion

1. Create Test Objectives from Main Objective (LLM)

2. Perform Test Objectives step-by-step using an AI Agent

3. Automatically identify and insert Checks (LLM)

4. Regression testing using a state-of-the-art approach [1-3]

5. Repair failing Tests or Steps using an AI agent

**Main Objective:**  
"Verify hotel options for various destinations"

**Blending AI with human intuition and strategic thinking**

**Reduced manual effort  
(save time/cost)**



[1] Similarity-based web element localization for robust test automation (Michel Nass, Emil Alégroth, Robert Feldt, Maurizio Leotta, and Filippo Ricca)

[2] Robust web element identification for evolving applications by considering visual overlaps (Michel Nass, Emil Alégroth, Robert Feldt, Riccardo Coppola)

[3] Improving web element localization by using a large language mode (Michel Nass, Emil Alégroth, Robert Feldt)

Refresh

Run Tests

Explore

Import Tests

Cocreate

Save Cookies

Settings

## Shout Dashboard

### Suite Objective

Verify hotel options for various destinations without booking



Test Progress



Test Coverage



Test Health

### Test Objectives

Verify booking search and selection for specified dates in Berlin.	8	0	Passed	<a href="#">Details</a>
Verify hotel selection for specified dates in Vienna.	8	0	Passed	<a href="#">Details</a>
Verify hotel reservation process for specific dates in Paris.	8	0	Passed	<a href="#">Details</a>
Verify hotel booking process in Amsterdam for selected dates.	8	0	Passed	<a href="#">Details</a>
Verify hotel reservation process for specific dates in London	8	0	Passed	<a href="#">Details</a>
Verify hotel reservation process for specific dates in Budapest	6	1	Faulty	<a href="#">Details</a>

### Issues

Description	Status	Screenshot	Action
Failed No available rooms for selected dates in Budapest.	Unresolved	<a href="#">View</a>	<a href="#">Resolve</a>

Type your request here...