Paper : LM-Driven User Interface

(8 pages) — An Evaluation

Overleaf + ACM / IEEE Style

Motivation of the research :
- LM & traditional UI applications
- Breaking out of both ⟨ chatbot interface
                         drag & click paradigm
- Expressiveness in NL
  & visual efficiency of UI

Challenges : - - -

Proposed Method : integration & hybrid design
                  of next gen UX : LM + UI

LM/UI

- Modeling of UI : Text box, button, ~~app~~ navigation links
  controls   (field)   (action)   (label)

- Describe apps as events / state (reducers)
  ⇒ Meta description of UI
  ⇒ Case study :   app collection / library
                     Weather Calculator Sign-up form

LM: NL Parser that generates
    "redux-actions" from text input

Evaluate:

Benchmark: GPT4 to generate user inputs
from ground truth

(Truth) Intentions	GPT-4 generated inputs	Model X Parser output redux-action
1 (true action req'd)	" ———— " " ———— " ⋮ ↕10	✓ ✗ ✓ ✓
2		
3 ⋮		
10 ⋮		

(100)

%

Model: X_1, X_2 ...