

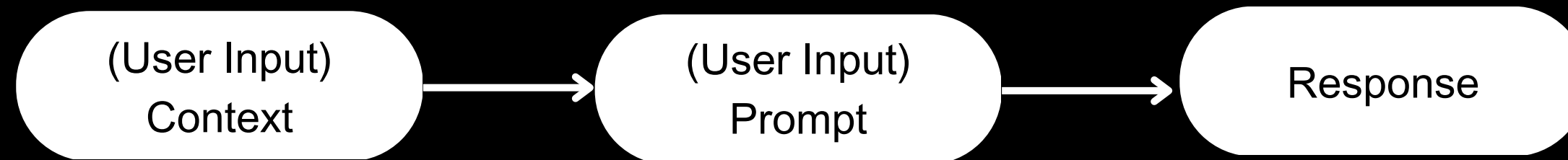
**>\_Erica**

*OS-Level agent that Listens, Reflects, and Responds to your every  
action.*

# Erica has...

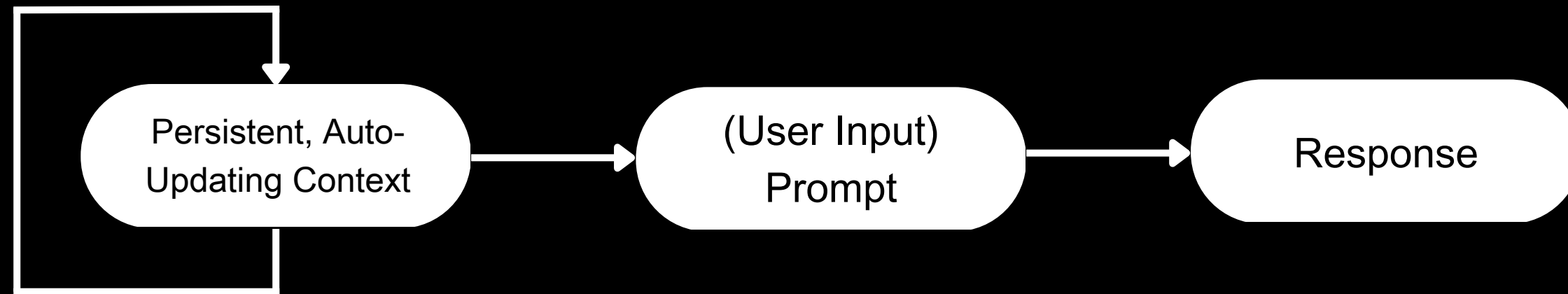
- Eyes
  - Erica captures all screen activity, parsing with Tesseract OCR
- Memory
  - Erica remembers previous conversations and user actions using embeddings
- Mind
  - Erica is capable of complex reflection upon self and user actions using our Reflexion framework
- Voice
  - Erica speaks fluidly using ElevenLabs Synthesis API
- Ears
  - Erica listens intently for commands using Whisper and activation cues
- Hands
  - Erica can autonomously retrieve documents and webpages with ease.

# Problem:



- User input of files/text into context window to prompt LLMs is unnatural and frictional.
- AI Assistants operating in walled gardens of SaaS offer poor general use.
- All human sensory input of digital interfaces is hypothetically accessible to AI, but currently radically underutilized

# Solution:

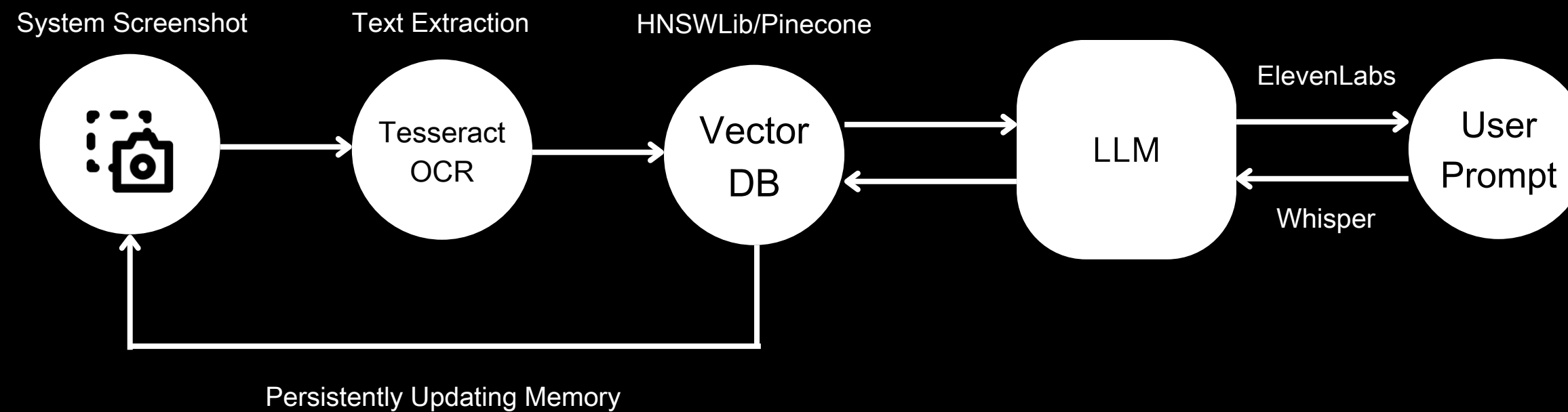


- Erika is a persistent OS-Level agent who knows what you're talking about, all the time. No need for feeding in context.
- Erika persistently ingests user inputs and displayed data to enable on-demand QA about anything the user interacts with, ever.

# What can Erika do?

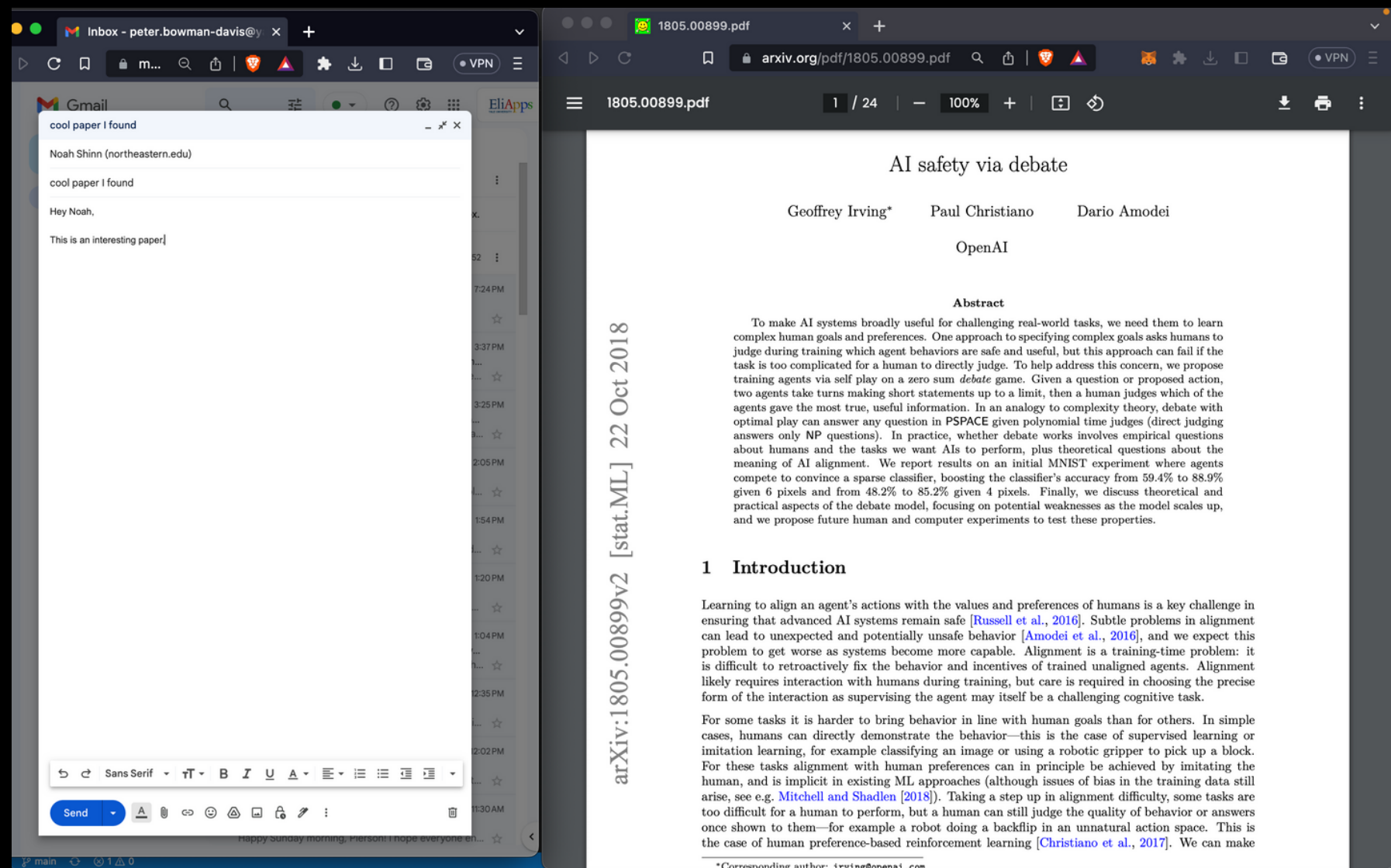
- **"What was the summary of the paper I was just looking at a few minutes ago?"**
- **"How does the code I'm looking at now work?"**
- **"Based on my action history over the past day, what are some optimizations I can make to boost my productivity?"**
- Querying, anywhere. Desktop ready, web-intelligent, and optimized for generalization
- Long-Term (cross-device) Recall + QA on tasks via vectorDB
- Reflective ability on actions + User guiding.
- Seamless Cross-Device Memory

# Tech Stack:



- User Action Logging: Periodic Screenshots
- OCR (Tesseract) + Feature Extraction
- Long-term memory via embeddings + vectorDB (HNSWLib/Pinecone)
- Querying via LLM 3.5-turbo
- User Interface:
  - Query: CLI or Voice (Whisper)
  - Response: CLI or Speech (ElevenLabs)
- Highly deployable dockerized environment, cross-device compatible via cloud vectorDB

"Hey Erica, I'm writing this email on the left, can you summarize the paper on the right for me?"



## Her Response:

the paper is titled "AI Safety Via Debate" and proposes a method for training AI systems to align their actions with human values and preferences. The authors suggest training agents via self-play on a zero-sum debate game, where two agents take turns making short statements, and a human judges which of the agents provided the most useful information. The paper reports results on an initial MNIST experiment, where agents competed to convince a sparse classifier, boosting classifier accuracy. Finally, the paper discusses potential weaknesses of the debate model and proposes future experiments to test these properties.

Future Development:

Now: OS-Level Agent



Future: OS-Level Agent



# Future Development:

## **AI-First Linux Kernel.**

Fully User Owned + Open Source Stack:

- Whisper
- LLaMa/GPT4All/StableLM
- Chroma
- OpenTTS

# Team:



Peter Bowman-Davis

- Yale Physics, Researcher @ MIT
- Prev:
  - ML Engineer, Halborn
  - Technical Cofounder, Politeia Inc. (Acq. '22)



Noah Shinn

- Researcher @ MIT + Princeton NLP Group
- Upcoming: OpenAI Research Resident
- Wrote "Reflexion: an autonomous agent with dynamic memory and self-reflection"