Recherche-Auto

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The Overwhelming Wave of Information

- Every day, over 2.5 quintillion bytes of data are created worldwide.
- The average professional spends about
 28% of their workday reading and
 answering emails, a fraction of the vast
 information landscape they navigate daily.
- Information overload leads to decision fatigue, reducing the ability to make informed choices.



Let's jump to a Specific Problem of Web-Search Research:

News Research and Information Aggregation

The Challenge of Precision in News Research

- Current tools often provide vast but unorganized data.
- Research requires excessive time, often leading to frustration and frequent dead-ends.

Professionals spend up to 25% of their time searching for information, yet 60% report frequent difficulty in finding what they need. This inefficiency translates to an estimated \$19,000 in lost productivity per employee annually. Which leads to an annual loss of 4.8 Billion USD annually (Number of employees to consider: 256,129 - ibisworld)





Introducing Recherche-Auto

A Short Introduction

Recherche-Auto revolutionizes web-based news research by organizing and encoding data into personalized knowledge graphs.

Link: https://recherche-auto.streamlit.app/

How It Works - The Technology

- Powered by the latest LLM (Large Language Models) technology Claude
 Opus.
- Implemented Function Calling within Claude.
- Auto error correction and dynamic search redirection to avoid dead-ends.
- RAG (Retrieval-Augmented Generation) systems for targeted, relevant results.
- Generation of Knowledge Graphs from Opus responses, through prompt-constraints specification.

Impact and Benefits

- Experience tailored news discovery, shaped to fit your individual needs.
- Save time and increase efficiency in your research endeavors.
 - Through automated research, we reduce research time by 80%, thus enabling to save at-least 15200\$ per employee per year.
 - We estimate total savings of up to: **3.8 Billion USD**
- We also minimize errors and enhance learning with refined search outcomes.



Meet the Team



Aman Priyanshu

Graduate Student in Privacy Engineering & Artificial Intelligence at Carnegie Mellon University. Previously, AAAI Undergraduate Consortium Scholar and Winner of CalHacks by UC Berkeley. Currently working on the Red-Teaming Network of OpenAI



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Technical Staff at **Adobe's** Digital Experience team. Previously, AAAI Undergraduate Consortium Scholar and also a winner of Adobe Women-in-Tech Scholar. Currently working with industrial research at Adobe and academic research in conjunction with CMU, UWash, and Rochester University.

Thank You!