Submission Summary

Conference Name

2025 2nd International Conference on Computing and Data Science (ICCDS)

Paper ID

1891

Paper Title

TaskXpert – A Unified AI-Powered Agent for Smart Emails, Web Extraction, and Data Visualization

Abstract

TaskXpert: A Unified AI-Powered Agent for
Smart Emails, Web Scraping, and Data Visualization is an
integrated web application that uses large language models
(LLMs) to automate interactions and simplify routine data
handling processes. In contrast to traditional AI solutions that
aid in the composition of email content but need to be manually
integrated into email clients, TaskXpert allows users to write,
edit, and send emails within a single application. It uses the
Mistral 7B Instruct model via API to generate context-sensitive,
high-quality email drafts from user input. For security and
privacy, the recipient's email address is entered by the user
manually. The system is built with a React frontend, Node.js
backend, and MongoDB database, and it supports large email
services such as Gmail, Yahoo, Outlook, and Fastmail.
TaskXpert also comprises support for file attachments, which broadens its use to personal and
workplace settings.Aside from
automated emailing, TaskXpert has a web scraping feature,
whereby a URL or a search term can be typed to extract all
hyperlink titles and URLs within a webpage giving instant
access to needed online data. To round up its features,
TaskXpert has a CSV data cleaning and visualization feature,
where users can replace missing values with mean, median, or
mode for both numerical and nominal data. The sanitized data
can then be graphically represented using bar charts and line
charts to derive valuable insights.By integrating LLM-based
email creation, real-time web data extraction, and ease-of-use
data processing capabilities, TaskXpert provides an unobtrusive and effective AI-driven
productivity tool.

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Submission Files

TaskXpert(16,24,34)_final (1).pdf (1 Mb, 5/10/2025, 11:21:39 AM)