WOOSTER
Applied Methods and Research Experience

Schneider Electric Team

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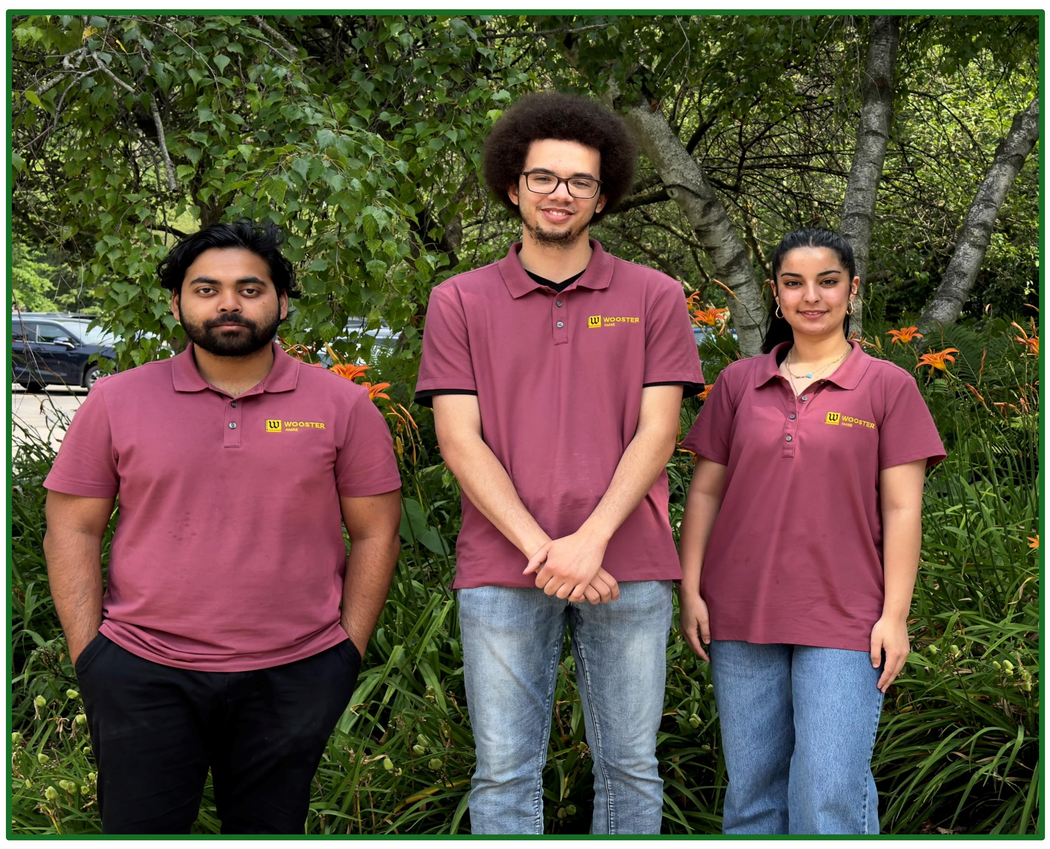
Advised by Dr. Rob Kelvey

Reviewed literature, tested Large Language Models, prompts, and tools, and studied autonomous agent performance to enhance the client's R&D efforts with state-of-the-art frameworks and resources.



CLIENT

Schneider Electric SE is a French multinational company that specializes in digital automation and energy management. It addresses homes, buildings, data centers, infrastructure and industries, by combining energy technologies, real-time automation, software, and services. We specifically worked with Schneider Electric's Sustainability Business data science team.

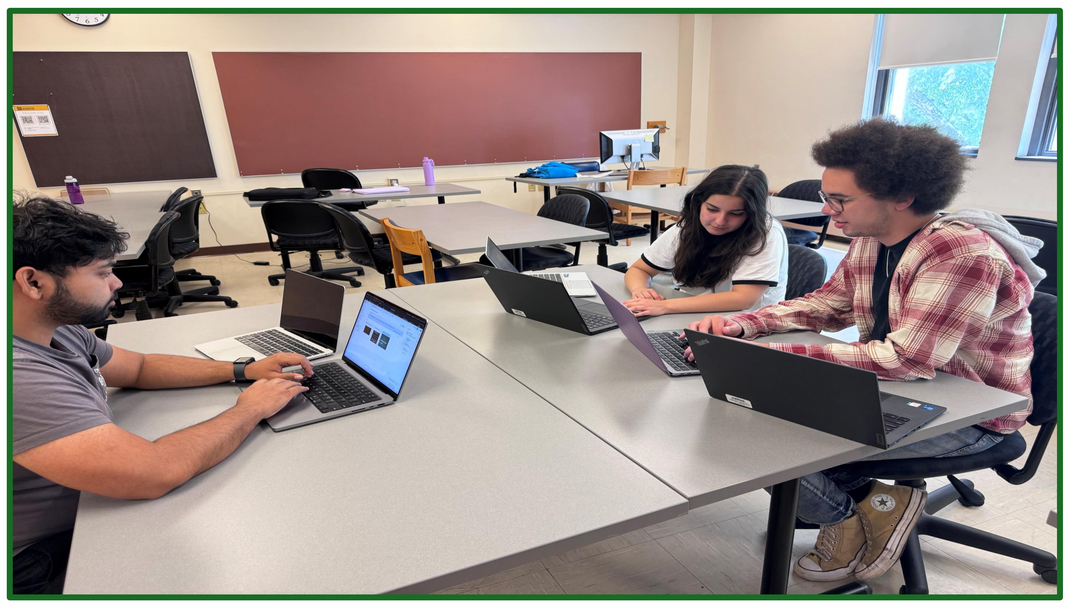
OVERVIEW

The goal of this project was to evaluate the reasoning and planning capabilities of Large Language Models (LLMs) and Autonomous Agents. The team conducted a series of experiments to build and test agents capable of performing various tasks. Key technologies utilized in these experiments included:

- **LLMs**: GPT-4, Gemini, Claude 3 Opus
- **Framework**: Llama Index
- **Platform**: Microsoft Azure

EXPERIENCE

- Developed technical skills relating to AI agents and agentic workflow.
- Utilized a divide-and-conquer approach to completing challenging experiments.
- Improved organizational skills through both schedule and folder structure.
- Established a welcoming environment for team productivity and communication.



CONCLUSION

The extensive experimentation and research about autonomous agents has led our team to determine best practices when working with multi-agentic workflows and agentic data extraction. These best practices will help Schneider Electric improve their use of autonomous agents and Large Language Models.

ACKNOWLEDGEMENTS

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