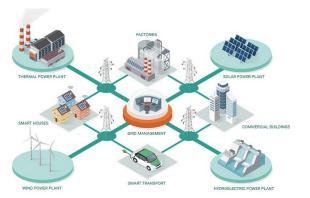
Detailed Design

SDMay25-42: Ian Bussan, Aditi Nachnani, Luke Eitzmann, Ian Louis, Scott Rininger

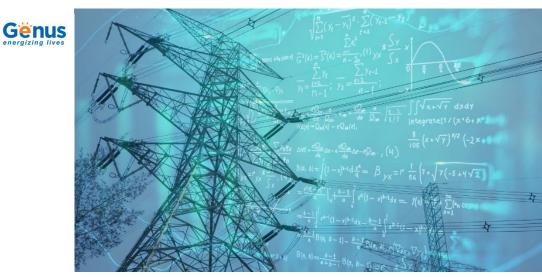


Project Overview



Al and IoT-Driven Smart Grid Technologies for Smart Energy Management

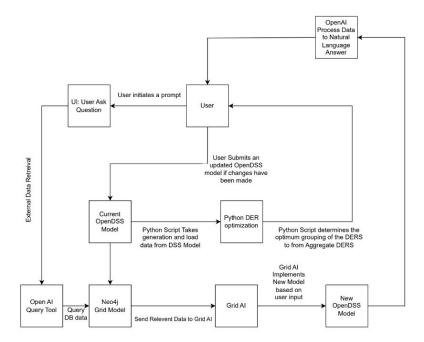
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Detailed Design and Visuals



Functionality

- GridGPT will provide users with a more accessible and user friendly interface to use GridAI
- GridGPT will successfully communicate between users and GridAI
- Retrieve data from GridAl sent to GridGPT send to the user to answer the users questions

Technology Considerations

- Distinct Technologies:
 - OpenAl
 - Strengths:
 - Provide advanced AI models
 - Provide documentation and tutorials
 - Weakness:
 - Limits: Different models have different token limits
 - Cost: Can not pass the budget given by ETG
 - Trade-offs:
 - Answers can be wrong sometimes
- Alternatives:
 - GeminiAPI

Areas of Concern and Development

- Integration with GridAl
- Making a user friendly product
- Delivering accurate information to user
- Keeping the cost of GridGPT low

Conclusion

- Functionality designed to answer user questions using GPT and retrieving data for user
- There are multiple other technology considerations like LLMs and grid application however they lack components for users
- Area of concerns and development consists of deliver accurate information to users and delivering data on time