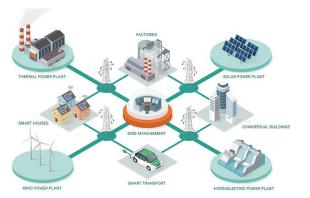
# **Detailed Design**

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

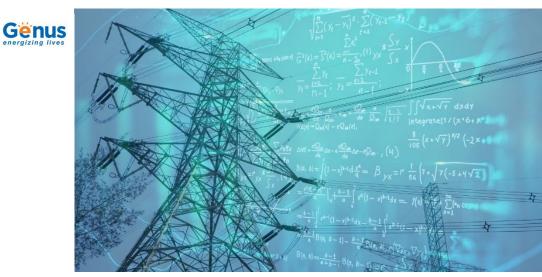


### **Project Overview**



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

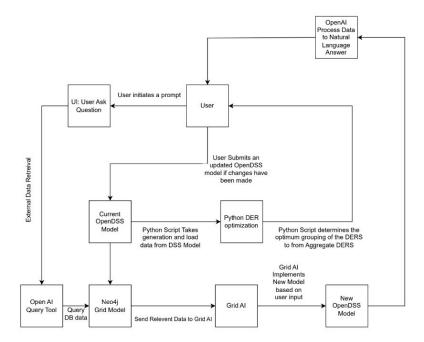
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#### **Detailed Design and Visuals**



# 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