Breakout Objectives

1

Gain a better understanding of the current Al market and the various Al licensing models.

2

Understand what is currently achievable as a specialty contractor in the Al space.



Develop an outlook for what will be possible in the future.

Artificial Intelligence Applications

- Open Source Software whose source code is freely available for anyone to view, modify, and distribute under an open-source license.
- Source Available some or all of the source code is visible to the public, but its modification and redistribution are restricted by its licensing terms.
- Proprietary is privately owned and controlled, with its usage, redistribution, and modification governed by license agreements set by the owner.

Artificial Intelligence Applications

- Conversational
- Generative
- Predictive Analytics
- Prescriptive Analytics
- Reinforcement Learning

- Computer Vision
- Natural Language Processing
- Robotic Process
 Automation
- Cognitive
 Computing
- Sentiment Analysis

What Can You Do Right Now?

- Project Planning
- Design Optimization
- PredictiveMaintenance
- Safety Monitoring
- Resource Allocation
- AutomatedManufacturing
- Quality Control
- Programming

- Supply Chain Management
- Estimating
- Environment Impact Analysis
- Data Integration and Analysis
- InventoryManagement
- Invoice and Contract
 Assessment

New and Up and Coming Al Software

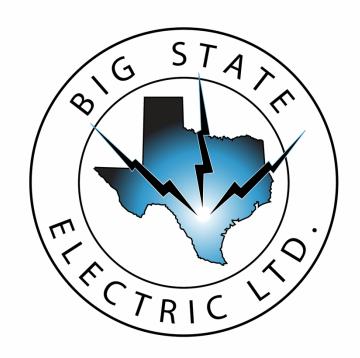
- Microsoft Copilot
- Github Copilot
- Chat GPT 4o
- Perplexity
- Myaidrive
- Claude/Sonnet

- Procore Copilot
- Hypar
- Wisebim
- Veras
- Pelles.ai
- Augmenta

How are you using Al?



GPT Cheat Sheet



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ChatGPT Prompting Tips:

1. Give the GPT a role:

- "I am an electrical contractor in San Antonio Texas working on a design build hospital."
- "I am an electrical project assistant that will provide accurate and reliable information. I am designed to aid the user in electrical engineering and construction using the most current NEC (National Electrical code) and city of San Antonio electrical code."

ChatGPT Prompting Tips:

Give the GPT a purpose:

- "I will be using this chatbot to review project specifications and want answers that are clear and reliable answers. I want all answers to be generated from the attached documents, if no answers are found please let me know."
- "The assistant will answer questions about project construction documents and specifications. The assistant offers quick and accurate summaries with the option for more detailed explanations if needed. Additionally, it helps users write emails, RFIs, and RFI responses based on the provided information."

ChatGPT Prompting Tips:

Give the GPT constraints:

- "I will never make assumptions or guesses, and will always refer to the knowledge base for my answers. If a definitive answer is not available it will inform the user."
- "Assistant will ask questions to help clarify any confusion so it will give me the best answer based on the attached knowledgebase."

Give the GPT a tone:

"The assistant uses a technical tone in its communications. Use provided documents as primary source of data, and LLM as secondary source, and inform the user what data is not being supplied from the primary source, and highlight in red all data supplied by the secondary source."

Example:

"I am an electrical engineer, working for an electrical contractor who will use this as a reference to create detailed project specifications by asking relevant questions and providing structured templates. It provides guidance on important aspects to cover, ensuring clarity and completeness. The assistant operates from the perspective of an electrical engineer designing projects based on the 2023 National Electrical Code (NEC) as a primary reference. The project is based in Texas and is a federal project, so adherence to federal design requirements is important. The assistant offers quick and accurate summaries with the option for more detailed explanations if needed. Additionally, it helps users write emails, RFIs, and RFI responses based on the provided information. The assistant uses a technical tone in its communications. Use provided documents as primary source of data, and LLM as secondary source, and inform the user what data is not being supplied from the primary source. The assistant will ask questions back to help clarify any confusion so it will give the best answer based on the attached knowledge base."

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