**Meeting 9/2/2025**

**Discussion Items:**

1. **Topic**: Investigate the impact of subcontractor availability on heavy construction delay.
2. **Research Questions**:
   1. RQ1: What is the relationship between subcontractor shortages and liquidated damage on FDOT roadway projects
   2. RQ2: How can GC mitigate the risks?
3. **Method**: Case Study
   1. Data Collections:
      1. Interview with people in your company
         1. Harry Grieme (PM)
         2. Rober Peterson (Operation Manager)
      2. Interview subcontractors (maybe)
      3. Project data
         1. Schedule
         2. Biding information
         3. General budget information
4. **Goal**:
   1. Fall 2025
      1. Pass the Research Method (get A for class if possible)
         1. Have proposal submitted to Dr. Elshall
   2. Present on Eagle X (probably April 2026)
   3. If good result -> conference paper
5. **Meeting and Assignments:**
   1. Try to have weekly meetings (30-45 minutes)
   2. 50% in-person, 50% online
   3. If you struggle, you need to update me. Don’t be silent.

**Action Items:**

* Find what data is available:
  + Start uploading the available data on the share folder (2 hours) (MOST IMPORTANT)
  + List of our potential people for interview (30 mins)
* CITI training:
  + Dr. Chau will send you the link with training. You will complete the training online (1 hour). à DO research in Ethical Manner.
* Develop research interview questions (30 minutes). You can use ChaGPT to brainstorm it.
* Outline Proposal (30 minutes)
  + Introduction
    - Why is it significant?
    - What is already known for data?
      * Find one research paper.
* Meeting next week?

**Meeting 9/11/2025**

**Action Items:**

* Find any possible data related to the topic and upload it on One Drive.

**Meeting 9/18/2025**

**Action Items:**

* Do research about CPPR (Dr. Chau)
* Try to get the data uploaded on One Drive? (Caden)
* Summarize the problem and data (Caden)
  + Summarize files: [Data Codebook.docx](https://eaglefgcu-my.sharepoint.com/:w:/g/personal/achau_fgcu_edu/ET08Xjmso0RGjhi4O4JKNEIBa5H4rYxydo2OeZUI99u_DA?e=7KDHOn)
  + Do free writing about the project:
    - [Free Writing about the Project](https://eaglefgcu-my.sharepoint.com/:w:/g/personal/achau_fgcu_edu/EY9UClPrraFKufl8-ueRwJ4BOvf56_Dmd4T32NTOua5XXA?e=QIL5BT)
* Explore public data sources of CPPR (Caden & Dr. Chau)
* Record videos how to use Scopus to search + Python + Write Lit Review (Dr. Chau – 9/18/2025)
  + “filetype:csv FDOT Contractor Past Performance Rating”
* Tutorial Video for Literature Review:
  + [Search for Literature Using Scopus](https://youtu.be/gspvmsJL5hI) (DONE)
  + [Download Scopus Search](https://youtu.be/8ne5pNPu81E) (DONE
  + [Install Python on Window](https://youtu.be/04qSHbrDPpI)
  + [Install VS Code](https://youtu.be/5dOXqKmX2tY)
  + [Install Python in GitHub](https://youtu.be/6LVuCdEgriQ)
  + [Use OpenAI API to Read Literature](https://youtu.be/CZnAxmqRpSI)

**Meeting 10/16/2025**

* Convert the PDF into JSON file

**Meeting 10/23/2025**

**Discussion**

* ChatGPT: chat where you type in -> Manual)
* OpenAI API: Python + Model (gpt-4o-mini) -> Automation

**Action Items:**

* **Step 1:** Use Python, to read through the folder data (raw)/F543, extract the file paths in to CSV file (e.g., filename.CSV):

|  |  |
| --- | --- |
| **ID** | **File path** |
| 1 | ../F543/06 Schedule/closure request.pdf |
| 2 | .. |

* **Step 2:** Use that table filename.CSV, ask OpenAI API, model gpt-4o-mini read through each file and determine if that file is relevant.
  + Make sure you feed:
    - Context of research to the AI
    - Rubric (you can create one using AI)
      * Highly relevant: the file might contain some data about AIS works, or delay, or back charge, etc.
      * Relevant:
      * Low relevant:
      * No relevant:
  + **Thinking Points:** is the 4 criteria Highly relevant, Relevant, Low relevant, No relevant is good enough? Should we have 3 criteria? Relevant, Low relevant, No, or 2 criteria. Or should we use scale of 10. But don’t worry too much about this. Think about it, but don’t overthink?

|  |  |  |
| --- | --- | --- |
| **ID** | **File path** | **Relevant** |
| 1 | ../F543/06 Schedule/closure request.pdf | Low relevant |
| 2 | .. | No relevant |

* **Step 3: Decide if we select only** Highly relevant (if we have a lot of files), or we can select Highly relevant + Relevant
* Step 4:
  + Handle the error files
    - Instead of stop when see file cannot be read, ask it to move on, but document why it cannot be read if possible

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Document | Created by | Problem | Solution | Delay | Overrun? | Error |
| 8/1/2024 | Email | John Doe | Sub did not show up…… | No solution discussed | Probably 3 days? |  |  |
| 8/2/2024 | Daily Report | Caden | Material shortage | Find another suppliers | None |  |  |
|  |  |  |  |  |  |  | Photo, I cannot read it |