

Weekly Schedule Schedule: Sunday, 2:00 PM

Our github repo: [alckasoc/Team-Chiken-wi22: The official ACM AI Team Chiken repository. \(github.com\)](https://github.com/alckasoc/Team-Chiken-wi22)

2/6/2022 Meeting Time: Sunday, 3:00 pm

Attendees: David, Nathan, Derrick, Min, Satyam, Vincent

Summary of Meeting

- *Sunday 2 PM is our weekly meeting time (team-wide)*
- Everyone is proficient in Python with some experience with ML and deep learning
 - We will dive into deep NLP immediately before narrowing our project scope
- 2 project ideas in mind:
 - Text summarization
 - OCR (pdf to latex?)
- Created github repo and established some structure to how we operate.

Action Items

1. Icebreakers w/ AI experience ✓
2. Project idea pitching (ongoing) ✓
 - a. Consider the feasibility of each project. ✓
 - b. How well does it align with everyone's interest in the group? ✓
3. Logistics going forward
 - a. Meeting times. ✓
 - b. Infrastructure behind group collaboration (how are we going to organize our group collaboration). ✓

Ideas

1. Voice recognition
2. OCR
3. Form/Push-up counter
4. Music generation
5. Text summarization
6. Some generic cv stuff
7. Wheres waldo?

Timeline

1. Getting started with deep learning and improving proficiency
2. Diving into Deep NLP (roughly 2-3 weeks with #1)
3. Start the project
 - a. Debrief the problem
 - i. Any related works?
 - ii. Data ingestion? Where are we getting the data?

- iii. What framework?
- b. Explore the problem
 - i. Given a difficult problem, get everyone up to speed on just the bare bone basics.
 - ii. Once everyone is comfortable with working with the field which the project pertains to, start to explore further (e.g. have other people tackled this problem?)
- c. Start the technical process!
 - i. Timeline TBD

Goals

- *Learn deep learning*
 - Need to brush up on deep learning and a deep learning framework? Check out these resources:
 - [deeplizard - YouTube](#)
 - [Keras with TensorFlow Course - Python Deep Learning and Neural Networks for Beginners Tutorial](#)
 - [Pytorch Tutorial - Setting up a Deep Learning Environment \(Anaconda & PyCharm\)](#) (part of a series of videos for learning PyTorch)
 -
 - **Note:** you don't need to cover everything in these resources. Cover what you need to get a solid understanding of deep learning.
 -
 - **Advice:** feel free to google and look for your own resources (I've included more resources in the resources.txt in our repo). The goal here is to simply catch you up on deep learning fundamentals.
- *Learn deep NLP*
 - Already proficient with the basics of deep learning? Check these resources out to get started with NLP:
 - [Deep Learning for NLP with Pytorch](#)
 - [Text classification with an RNN | TensorFlow](#)
 - [Hands-On Machine Learning with Scikit-Learn, Keras & TensorFlow](#) (check out chapters 15 and 16; this might be the most reliable resource; Thanks Nathan!)
 -
 - **Note:** you don't need to cover everything in these resources. Cover what you need to get a solid understanding of deep learning in NLP.
 -
 - **Advice:** there are a ton of resources out there! Tutorial hell can be a bad place (jumping from 1 tutorial to the next and piecing things together). There is no end-all-be-all resource unfortunately. In my opinion, walk through a project (simple one)! See how all the components of your ML pipeline fit together. Then,

when you go deciphering other resources to learn more, you can use that project as a reference to see how the puzzle fits together.

-
- **Advice:** side note from me (Vincent), I'm going to include more resources, guides, tips and stuff on the repo for y'all to get started. Hope you guys find it helpful! And also, once we establish some sort of structure on how we operate as a team, the floor is yours. Go crazy, do whatever, and learn, haha.

Goals Summary

- *Catch up on deep learning and dive into deep NLP above.*
-
- **Note:** Our github repo has a "Getting-Started" folder for you to include any code/data/model when you either catch up on deep learning or dive into deep NLP (or both). Everyone's "Getting-Started" progress is collected into 1 folder for convenience and also organization.
-
- **Note:** clone the repo; make sure to organize your files within the "Getting-Started" folder; models/data that are too large (> 5 MB) make sure to ignore them in your .gitignore.