Anuj Rattan just slid into the server. — 05/27/2021
Nathaniel Chan just showed up! — 05/27/2021

May 28, 2021

https://www.when2meet.com/?12007792-hdaXV

[10:26 AM]
Hey guys, so just click on the link and put your username as your own name
[10:26 AM]
Here we can find the availability of each of our team members and we can start planning out when our meetings should be held

2

Pranav Sood — 05/28/2021
Hey, so while i am still recruiting 2 more people. Lets have a meeting on monday from 4:30 to 5 to just be a lil intro for all of us to know each other a bit better and meet each other
Nathaniel Chan — 05/28/2021
Sounds good, Mon actually works best for me cause most of my stuff is due Fri, but I'm good with changing it depending on when the new members will be available
Pranav Sood — 05/28/2021
perfect!

[12:05 PM]
nice to have you aboard Natchan

1

Anuj Rattan — 05/28/2021
Works for me as well
Nathaniel Chan — 05/28/2021
Just to add me on a Canvas group, my full name is Nathaniel Chan. If u need it for later, my email is nca60@sfu.ca(edited)

May 31, 2021

Welcome Vaibhav Saini. Say hi! — 05/31/2021
Vaibhav Saini — 05/31/2021
Hey everyone
Pranav Sood — 05/31/2021
Hey, could you scroll up and click on the when2meet link and fill it out please
Vaibhav Saini — 05/31/2021
Sure
Pranav Sood — 05/31/2021
thanks!
Vaibhav Saini — 05/31/2021
Done
Pranav Sood — 05/31/2021
so yea just be here for our quick intro meeting at 4:30 and thats it for today
Vaibhav Saini — 05/31/2021
Sure
Nathaniel Chan — 05/31/2021
Just making sure, we're meeting on Discord?
Pranav Sood — 05/31/2021
coming
Anuj Rattan — 05/31/2021
https://www.kaggle.com/vbookshelf/respiratory-sound-database
Respiratory Sound Database
Use audio recordings to detect respiratory diseases.
Pranav Sood — 05/31/2021
https://www.kdnuggets.com/2020/02/audio-data-analysis-deep-learning-python-part-1.html
KDnuggets
Audio Data Analysis Using Deep Learning with Python (Part 1) - KDnu...
A brief introduction to audio data processing and genre classification using Neural Networks and python.
Pranav Sood — 05/31/2021
Group 12 is our name for now on canvas

1

Nathaniel Chan — 05/31/2021
Might just be me, but I don't see a group 12
Vaibhav Saini — 05/31/2021
groups are only till 10 right?
Nathaniel Chan — 05/31/2021
I guess unless u add one with that button on the top right
Vaibhav Saini — 05/31/2021
I guess join 7? its the first empty group
Nathaniel Chan — 05/31/2021
I guess we can finalise that later cause Pranav Sood has a meeting rn
Vaibhav Saini — 05/31/2021
yea sure ... its not that imp rn

1

Pranav Sood — 05/31/2021
yea so i made a group and it got deleted so we can just join 7

1

Nathaniel Chan — 05/31/2021
I still see group 12, but it's labelled as a student group whereas groups 1-10 are labelled as project group. Not sure what the difference is. But yeah, I'll join group 7
Pranav Sood — 05/31/2021
oh thats weird lol
Vaibhav Saini — 05/31/2021
Ok so group 7 then?

June 2, 2021

Nathaniel Chan — 06/02/2021
Just noticed there's a 5th member in our Canvas group. I'm not sure if you guys recruited him, he randomly joined our group, or professor assigned him to us
Vaibhav Saini — 06/02/2021
I think thats on me ... Before joining you guys I was in a group with few of my friends along with this guy ... My friends dropped the course hence why I was looking for a new group and joined u guys

[8:25 PM]
I think he just saw my name and joined this group ... I don't really know him

[8:26 PM]
Kinda weird tbh

Nathaniel Chan — 06/02/2021
No worries; I'll let you guys decide if we want to add him to our group
Anuj Rattan — 06/02/2021
Was wondering who that was lol, didn't know if it was just someone who joined randomly or someone who actually joined the group
Vaibhav Saini — 06/02/2021
Yea ... I told pranav about him ... That was he was interested in joining the group ... But I didn't realise he was this interested that he would just join group on canvas lol

1

June 3, 2021

Pranav Sood — 06/03/2021
yea, i gotta go messsage this guy, i messaged the other one. I guess im trying to see who fits better rn

2

June 6, 2021

Pranav Sood — 06/06/2021
Hey guys, im sorry to say i dropped the ball on recruiting a 5th member as i got busy, so i am going to restart the search on that

[10:56 PM]
in the meanwhile i was thinking of planning another meeting to go over some actual goals of this project that are listed on the course website

[10:56 PM]
Does Wednesday at 3PM work for everyone still?

2

June 7, 2021

Anuj Rattan — 06/07/2021
Yeah works for me

June 8, 2021

Jyotiraditya Mayor just landed. — 06/08/2021
Jyotiraditya Mayor — 06/08/2021
Hello everyone
Pranav Sood — 06/08/2021
Welcome aboard

[3:21 PM]
Glad to see we have a couple days where we are all free

1

June 9, 2021

Pranav Sood — 06/09/2021
Everyone still good for today at 3pm?

3

Pranav Sood — 06/09/2021
gimme one sec

[3:01 PM]
just going to the washroom

Anuj Rattan — 06/09/2021
Omw too

Vaibhav Saini — 06/09/2021
sorry, I was having lunch ... be there in a sec

Anuj Rattan — 06/09/2021
Sorry I'm having computer trouble rn it got stuck in a reboot cycle

Vaibhav Saini — 06/09/2021
CMPT340-Summer2021-Project-Ideas.docx
5.26 MB

Anuj Rattan — 06/09/2021
https://drive.google.com/drive/folders/1e1OTACsf9h9Mi5uoqIsDyb3h904F6VDk?usp=sharing

[3:28 PM]
https://drive.google.com/drive/folders/1e1OTACsf9h9Mi5uoqIsDyb3h904F6VDk?usp=sharing

Pranav Sood pinned a message to this channel. See all pinned messages. — 06/09/2021
Pranav Sood pinned a message to this channel. See all pinned messages. — 06/09/2021
Pranav Sood pinned a message to this channel. See all pinned messages. — 06/09/2021
Anuj Rattan — 06/09/2021
https://www.overleaf.com/8983626122kjvjrsrttkqw
Overleaf, Online LaTeX Editor
An online LaTeX editor that's easy to use. No installation, real-time collaboration, version control, hundreds of LaTeX templates, and more.
Pranav Sood pinned a message to this channel. See all pinned messages. — 06/09/2021
Pranav Sood pinned a message to this channel. See all pinned messages. — 06/09/2021

June 12, 2021

Pranav Sood — 06/12/2021
Group 7: Pranav Sood prsood@sfu.ca
Anuj Rattan — 06/12/2021
Anuj Rattan Anuj Rattan@sfu.ca
Jyotiraditya Mayor — 06/12/2021
Jyotiraditya Mayoraditya Mayor jmayor@sfu.ca
Vaibhav Saini — 06/12/2021
Vaibhav Sainihav Saini Vaibhav Sainihavs@sfu.ca
Nathaniel Chan — 06/12/2021
Nathaniel Chan nca60@sfu.ca

June 14, 2021

Jyotiraditya Mayor — 06/14/2021
When are we going to have our next meeting?
Vaibhav Saini — 06/14/2021
Every Wednesday right?

June 15, 2021

Pranav Sood — 06/15/2021
Yeup

[6:15 PM]
Every Wednesday at 3pm

1

June 16, 2021

Pranav Sood — 06/16/2021
Hey guys sorry to spring this so late, but I had something personal come up today. And won't be able to attend

[12:23 PM]
If you guys do the meeting could you take notes for me, or we could postpone it this week to tomorrow at the same time

So Thursday at 3pm

2

Anuj Rattan — 06/16/2021

I'm fine with postponing

1

Jyotiraditya Mayor — 06/16/2021

Works for me

Vaibhav Saini — 06/16/2021

I am fine with doing it tom ...

Nathaniel Chan — 06/16/2021

No pressure, but I'll just throw out a suggestion on how to work with the dataset: we could download and upload it the Google drive folder and use Google Colab to process/do deep learning on it. Some pros would be that it's generally faster to train, already set up with libraries to do ML, & we don't need to keep our processors running to do ML. Cons would be a 12-hr limit per day for free users, can't download additional (possibly necessary) libraries, and figuring out how to use it

Vaibhav Saini — 06/16/2021

It's not a bad idea ... We can actually use online notebooks to aid with deep learning ... Other than Google Collab .. jetbrains datalore is also an option that we can look into

1

June 17, 2021

Nathaniel Chan — 06/17/2021

Fyi, my GitHub username is Natchan03

Jyotiraditya Mayor — 06/17/2021

My Github username is Mayor2305

Pranav Sood — 06/17/2021

https://github.com/P-Sood/CMPT_340

GitHub

P-Sood/CMPT_340

Contribute to P-Sood/CMPT_340 development by creating an account on GitHub.

Anuj Rattan — 06/17/2021

arattan99

Vaibhav Saini — 06/17/2021

GitHub: Vaibhav SainiSaini

Pranav Sood — 06/17/2021

Learn more about the lungs and the sounds they make

[3:17 PM]

https://eden.dei.uc.pt/~ruipedro/publications/Conferences/ICBHI2017a.pdf

[3:17 PM]

do a quick skimming over this and maybe highlight questions you have

[3:17 PM]

if you have any

[3:19 PM]

Maybe think of ways we could imporve if you see any

[3:19 PM]

just remember its a quick skim at the least so no pressure

June 20, 2021

Pranav Sood — 06/20/2021

Hey guys, go in the slack channel and open up the overleaf and the excel link, and put your name and student number in both places

[1:23 PM]

Excel sheet: https://sfuca0-my.sharepoint.com/:x:/g/personal/hamarneh_sfuca0_onmicrosoft_com/EeXWn-wEmMxPi5DVY7zQmVgBft7ES35Z5VibPA61X8XUHg?e=3QWJ91

[1:25 PM]

Overleaf: https://sfuca0-my.sharepoint.com/:x:/g/personal/hamarneh_sfuca0_onmicrosoft_com/EeXWn-wEmMxPi5DVY7zQmVgBft7ES35Z5VibPA61X8XUHg?e=3QWJ91

[1:27 PM]

Line 25 and Line 36 on overleaf

Anuj Rattan — 06/20/2021

Hey guys, I created a rough outline of what we should be aiming towards in terms of week to week goals. I don't intend for this to be a definite plan but rather a rough guideline of what we should be aiming towards.

https://trello.com/b/5YFKZVCy/project

Trello

Organize anything, together. Trello is a collaboration tool that organizes your projects into boards. In one glance, know what's being worked on, who's working on what, and where something is in a process.

2

@Pranav Sood

Overleaf: https://sfuca0-my.sharepoint.com/:x:/g/personal/hamarneh_sfuca0_onmicrosoft_com/EeXWn-wEmMxPi5DVY7zQmVgBft7ES35Z5VibPA61X8XUHg?e=3QWJ91

Nathaniel Chan — 06/20/2021

Just going to mention that this link also goes to the Excel sheet

June 21, 2021

Pranav Sood — 06/21/2021
https://towardsdatascience.com/getting-started-with-google-colab-f2fff97f594c
Medium
Getting Started With Google Colab
A Basic Tutorial for the Frustrated and Confused
@Nathaniel Chan
Just going to mention that this link also goes to the Excel sheet
Pranav Sood — 06/21/2021
oops, if you go on slack you will find overleaf

1

[8:51 AM]
just dont go on the excel page
[8:51 AM]
from the slack link
Pranav Sood — 06/21/2021
Oh in my course btw, i am learning about google colab as well

1

June 23, 2021

Jyotiraditya Mayor — 06/23/2021
Meeting at 3 right?
@Jyotiraditya Mayor
Meeting at 3 right?
Nathaniel Chan — 06/23/2021
I'm assuming yes

1

Jyotiraditya Mayor — 06/23/2021
the models used: Machine learning algorithms proposed in the literature include empirical rulebased methods, support vector machines (SVMs), artificial neural networks (ANNs), Gaussian mixture models (GMMs), k-nearest neighbors (k-NNs), and logistic regression models.
Jyotiraditya Mayor — 06/23/2021
btw, found a very nice video about random forest: https://www.youtube.com/watch?v=J4Wdy0Wc_xQ
YouTube
StatQuest with Josh Starmer
StatQuest: Random Forests Part 1 - Building, Using and Evaluating

1

Vaibhav Saini — 06/23/2021
I have added some of the resources that I found to slack ... please do check them out https://cmpt340workspace.slack.com/archives/C0240NSGFQF/p1624499047005700

June 24, 2021

Nathaniel Chan — 06/24/2021
Going to mention in advance that I have a co-op interview at the same time of our next meeting, so I won't be there. Apologies for that and let me know what happens!

June 29, 2021

Jyotiraditya Mayor — 06/29/2021
should we do the meeting before / after?
Vaibhav Saini — 06/29/2021
If its fine with everyone, maybe we can have the meeting around 4-4:30 instead. I actually got my second vaccine dose appointment tom at 2.
Nathaniel Chan — 06/29/2021
I'm available if it's after about 3:45pm. We can also meet on Thurs

June 30, 2021

Pranav Sood — 06/30/2021
Thursday i am busy

[9:34 AM]
But today at 4 should work
[9:34 AM]
Is everyone fine wirh that?

3

Jyotiraditya Mayor — 06/30/2021
similar covid dataset: https://www.kaggle.com/ruchi798/covid19-pulmonary-abnormalities
COVID-19 + Pulmonary Abnormalities
Spectrogram Images of Breathing Sounds
Vaibhav Saini — 06/30/2021

Hey guys sorry I won't be able to today ... I am still outside ... the vaccination took forever ... please let me know hw for this week

Pranav Sood — 06/30/2021

do you have anything to add over what you did this past week @Vaibhav Saini

Vaibhav Saini — 06/30/2021

Hmm ... Nothing special... just read some papers and looking at models... i will update the spreadsheet

[4:25 PM]

BTW did u guys get a chance to look at the resources I shared last week?

July 7, 2021

Jyotiraditya Mayor — 07/07/2021

hello people, i wont be able to join the meeting today. Just got a call, have to go somewhere important

1

[11:35 AM]

please brief me afterwards

[11:35 AM]

really sorry about that

Nathaniel Chan — 07/07/2021

Just uploaded a zip file of the database (about 3.69GB) to the shared Google Drive folder

July 8, 2021

Pranav Sood — 07/08/2021

Hey guys so i got all the data ready and processed

[2:55 PM]

@Nathaniel Chan it only took 12 mins to do, i tried saving it into a csv file but the list of values was so large that the csv couldnt contain it

1

July 14, 2021

Anuj Rattan — 07/14/2021

@Pranav Sood hey, just checking in on if you'll be a bit late

July 16, 2021

Anuj Rattan — 07/16/2021

Just to double check, we're meeting right after the quiz correct?

Vaibhav Saini — 07/16/2021

Yeah

1

[2:09 PM]

Did everyone read their code and stuff?

Anuj Rattan — 07/16/2021

yep, found some interesting insights and some stuff that hopefully can speed up our load times

Vaibhav Saini — 07/16/2021

That's wonderful ... I managed to find a way to save data after we run librosa.load

Pranav Sood — 07/16/2021

Fourier analysis and comparing frequencies

July 17, 2021

Anuj Rattan — 07/17/2021

```
Just a quick update: I added some code that checks the sampling frequency of each wav file before we apply the audio_files_data.applymap(librosa.load) line and it drops about 100 samples from our total and this actually takes my execution time
down from ~20 minutes down to ~11 minutes
```

2

Vaibhav Saini — 07/17/2021

That's great ... I was also working on something similar ... Try to sample the audio files at different frequencies and features extraction ... Cause I felt we were sampling everything at 22050

July 20, 2021

Jyotiraditya Mayor — 07/20/2021

https://www.kdnuggets.com/2020/02/audio-data-analysis-deep-learning-python-part-2.html

KDnuggets

Audio Data Analysis Using Deep Learning with Python (Part 2) - KDnu...

This is a followup to the first article in this series. Once you are comfortable with the concepts explained in that article, you can come back and continue with this.

Pranav Sood — 07/20/2021

@everyone we are going to be implementing a K-NN (K - Nearest Neighbors classifer)

[12:45 PM]

https://stats.stackexchange.com/questions/420202/using-knn-for-audio-classification-based-on-fft

Cross Validated

Using KNN for audio classification based on FFT

I need to classify whether a product sound "good" and "bad" based on FFT of its audio recording. The FFT magnitudes are show for frequencies from 0 to 7khz, with a frequency resolution of 5 hz, so ...

[12:45 PM]
This link is using Fast Fourier Transform in conjunction with NN
[12:45 PM]
also posting on slack
[12:46 PM]
https://www.kaggle.com/papeloto/urban-sound-feature-extraction-knn

Urban Sound - Feature Extraction & KNN
Explore and run machine learning code with Kaggle Notebooks | Using data from [Private Datasource]

[12:47 PM]
This link is actually someone using K-NN classifier on a audio dataset in Kaggle
[12:47 PM]
So this is some good code to follow
[12:49 PM]
So one of the things we need from pre-processing is MFCC. Maybe we dont want to hand in our project with this as our training and testing data, but this would be a good example to work off of first before we delve into other ways to do this project

Pranav Sood — 07/20/2021
https://medium.com/analytics-vidhya/how-to-use-google-colab-with-github-via-google-drive-68efb23a42d

Medium
How to use Google Colab with GitHub via Google Drive
… we will be discussing on how Google Colab can be used with GitHub via Google Drive for our Data science, Machine Learning projects …

[1:01 PM]
Here is the link if anyone is interested but ill be adding in the code at the top to let people push their code directly to github(edited)

July 21, 2021

Vaibhav Saini — 07/21/2021
Hey guys has anyone read this code notebook on Kaggle

[11:25 PM]
https://www.kaggle.com/gizemtanriver/disease-classification-by-cnn-using-mfcc

Disease Classification by CNN using MFCC
Explore and run machine learning code with Kaggle Notebooks | Using data from Respiratory Sound Database

[11:26 PM]
Its pretty much using MFCC (what we were talking about today) and CNN for diagnosis prediction

Vaibhav Saini — 07/21/2021
@everyone Since we are migrating to github, can someone take the initiative (hopefully with a faster connection) and move the dataset to github

July 22, 2021

Jyotiraditya Mayor — 07/22/2021
hey guys, i was wondering if it will make sense to use ensembles (use multiple classifiers and let them vote) for our model

[6:35 PM]
the only concern would be the amount of data we have.
[6:35 PM]
any suggestions?

Vaibhav Saini — 07/22/2021
I don't mind using multiple classifiers ... It will only increase the accuracy of the our predictions ... But I guess before start tryna make multiple model work, we should focus on having atleast 1 model that works so that we have something to fall back to

July 23, 2021

@Vaibhav Saini
@everyone Since we are migrating to github, can someone take the initiative (hopefully with a faster connection) and move the dataset to github

Pranav Sood — 07/23/2021
For sure i can look at that

Vaibhav Saini — 07/23/2021
Yea, umm since moving a 3gb dataset to GitHub seems useless and impossible... I was thinking maybe we should just preprocess the data that push that to github

Pranav Sood — 07/23/2021
Hey Vaibhav Saini can you join the voice chat

Vaibhav Saini — 07/23/2021
Ahh sure ... I am in the washroom rn ... I will join soon sorry

Jyotiraditya Mayor — 07/23/2021
take your time bro

July 26, 2021

Pranav Sood — 07/26/2021
Hey guys ill be back in a sec

July 27, 2021

Anuj Rattan — 07/27/2021
@here Hey guys, just wanted to check in with everyone in regards to Profs message in slack. Do we want to attend? If so I feel like we should try to think of questions we may have regarding our project and make sure we get the most out of it.

Jyotiraditya Mayor — 07/27/2021
I do have some questions but won't be able to join
Anuj Rattan — 07/27/2021
Put em here, I can always join and ask instead and post the profs response in discord
Nathaniel Chan — 07/27/2021
I'm at work, so I likely won't be around fyi
Vaibhav Saini — 07/27/2021
Yea, even I am not available
Anuj Rattan — 07/27/2021
I am definitely available so if you guys have questions you want me to ask I'll go in and ask them on behalf of our team

July 28, 2021

Nathaniel Chan — 07/28/2021
Reorganised our code with labels cause I've noticed it started to become a little messy. I might have mislabelled some of our code, so feel free to change the labels or add some more to make our code more clear.

[3:03 PM]
R we having a meeting today or did I miss something?

Anuj Rattan — 07/28/2021
I'm on my way, my bad
Anuj Rattan — 07/28/2021
@Pranav Sood hey, are you gonna be around for the meeting?

July 30, 2021

Pranav Sood — 07/30/2021
Whoops I completely forgot about Wednesday my bad guys

[2:57 PM]
I'm in the thing rn if anyone wants to come

August 2, 2021

Nathaniel Chan — 08/02/2021
R we going to have a meeting today?
Nathaniel Chan — 08/02/2021
I'm guessing that's a no cause it's a holiday
Vaibhav Saini — 08/02/2021
Ohh wait ... I didn't see the msg early sorry ... I am down for a meeting lol
Nathaniel Chan — 08/02/2021
We can probably just leave it for Wed
Vaibhav Saini — 08/02/2021
Yea

August 3, 2021

Jyotiraditya Mayor — 08/03/2021
Hello everyone

[3:32 PM]
I am done with sequential model
[3:33 PM]
I made 2 using different implementations
[3:33 PM]
One is 20% accurate
[3:33 PM]
Second is 92%
[3:34 PM]
I was thinking that @Vaibhav Saini , if you want to collaborate, i think we can add the model to your implementation of knn.
[3:34 PM]
I mean, after your knn, we can show two sequential models for a comparison among the three

Vaibhav Saini — 08/03/2021
Hey, thats great ... We can surely do that

[3:36 PM]
I am extremely busy today, but lets do it tom

Jyotiraditya Mayor — 08/03/2021
Yup
Vaibhav Saini — 08/03/2021
Brilliant(edited)

August 4, 2021

Pranav Sood — 08/04/2021

I'm at the hospital rn so just update me later

1

Nathaniel Chan — 08/04/2021
Lost track of time. Did we meet up already?
Anuj Rattan — 08/04/2021
No haven't seen anyone iny et
Jyotiraditya Mayor — 08/04/2021
not yet

[3:13 PM]
idk if Vaibhav Saini is coming

Jyotiraditya Mayor — 08/04/2021
so @Nathaniel Chan is going to finish random forests by the weekend, @Vaibhav Saini and myself are going to work towards knn and cnn (the two sequential). Idk how you feel about it, @Pranav Sood, if you want to work on the website thing so that our code is more presentable. @Anuj Rattan is working on kmeans, should be done by the weekend as well?.

[3:23 PM]
If this works out as planned, we can start our report by next week..

[3:24 PM]
today, i will also text the prof about a meeting/ discussion on slack about the features we are going to extract. This will help us to prepare a well documented report./.

August 9, 2021

Nathaniel Chan — 08/09/2021
Sorry, haven't finished Random Forest yet. Was busy over the weekend & had to prepare for an interview today. I'll get it done by tonight
Jyotiraditya Mayor — 08/09/2021
Are we meeting today tho?
Nathaniel Chan — 08/09/2021
Good question, I'm available to meet today fyi
Anuj Rattan — 08/09/2021
I checked around 3 no one was in and I'm no longer available for meeting today
Nathaniel Chan — 08/09/2021
Np, we can meet Wed. I thought meetings on Mon was at 7pm though?

[5:07 PM]
@Anuj Rattan Just in case this is useful for u, I used your optimised_audio_data.ftr to generate the save_featuredvalues.pkl by running it through the "Feature Extraction" section of the Machine Learning notebook

Anuj Rattan — 08/09/2021
I thought it was 3 for both, if not that's my bad i hadnt planned to meet at 7
Nathaniel Chan — 08/09/2021
We met at 7pm last time, but we didn't write anything on Discord about the time I'm available Fri's as well now cause basically quizzes & stuff are done
Pranav Sood — 08/09/2021
oh myb i thought it was for 7

[6:01 PM]
all good should have been more clear

[6:02 PM]
if anyone wants to pull up ill be there

1

Pranav Sood — 08/09/2021
hey gimme 1 sec
Nathaniel Chan — 08/09/2021
np
Pranav Sood — 08/09/2021
https://www.sfu.ca/computing/newsandevents/2020/biomedical-computing-students-use-their-skills-to-research-covid.html

August 11, 2021

@Pranav Sood
https://www.sfu.ca/computing/newsandevents/2020/biomedical-computing-students-use-their-skills-to-research-covid.html
Nathaniel Chan — 08/11/2021
Summary of demo from other groups: - 1 used fancy drawing & slides - 1 ran through their 9-page report - 2 showed website - displayed different graphs by selecting options - calculated chance & risk of COVID from input info(edited)

[12:34 PM]
If there's more info u want from the link, let me know. Also, may not be available for meeting b/c I might come back from work late . If not, let me know what's up

Pranav Sood — 08/11/2021
Thanks Nathaniel Chan!

[3:43 PM]
Is anyone available for a meeting later today i know i missed out on the 3pm one

Pranav Sood — 08/14/2021
so 10?

Vaibhav Saini — 08/14/2021
Sounds good ... see you guys after 4 ig

Nathaniel Chan — 08/15/2021
On second thought, I'm available for 10 today
Jyotiraditya Mayor — 08/15/2021
Gimme 5 min
Anuj Rattan — 08/15/2021
My bad I thought I set my alarm for 9am but it was 9pm that's on me
Pranav Sood — 08/15/2021
How is everyone good for 4pm?

[3:15 PM]
5pm though if some people cant make it

Jyotiraditya Mayor — 08/15/2021
either works for me
Jyotiraditya Mayor — 08/15/2021
so 4 or 5??
Vaibhav Saini — 08/15/2021
Are we meeting now?
Pranav Sood — 08/15/2021
Hey Vaibhav Saini

[4:05 PM]
Join id you can

Vaibhav Saini — 08/15/2021
Sure
Pranav Sood — 08/15/2021
Group meeting at 7?

[6:18 PM]
@everyone

Pranav Sood — 08/15/2021
@everyone If you guys are able a meeting tomorrow all day, would be super useful

[9:35 PM]
I will probably be online from 10am until way late working on this

[9:36 PM]
lets all grind it out tomorrow so we arent stressing on Tuesdya

Jyotiraditya Mayor — 08/15/2021
Works for me

[9:39 PM]
After 11 till whenever

Vaibhav Saini — 08/15/2021
I am ok with that
Jyotiraditya Mayor — 08/15/2021
@everyone, did u guys start on the report? I created a shared google doc "report"

[10:46 PM]
If you wanna work on it there… totally upto you tho

Anuj Rattan — 08/15/2021
The report does need to be done on overleaf in LaTeX if you wanna do your draft on google docs that's fine.
Jyotiraditya Mayor — 08/15/2021
Yup that's what i was planning to do and then finalize it afterwards as latex
Pranav Sood — 08/15/2021
So 1) Supervised vs UnSupervised 2) Training model and testing on both test and test_transformed 3) training on both transformed and regualr and then testing on both

[11:06 PM]
Things to talk about in our report/ will go over tomorrow during meetings

2

Jyotiraditya Mayor — Yesterday at 1:30 AM
guys, i got an idea and tweaked my 1st sequential model, now its 85% efficient
Nathaniel Chan — Yesterday at 6:37 AM
For any figures or images, please save them as image files. I've created a folder called report_figures in the Google Drive u can save them to. I can get the images from the draft report, but sometimes the quality gets reduced (edited)
Pranav Sood — Yesterday at 10:38 AM

https://scikit-learn.org/stable/modules/classes.html?highlight=metrics#module-sklearn.metrics.cluster

Jyotiraditya Mayor — Yesterday at 5:10 PM
@everyone when are we going to start on the overleaf thing?
@Jyotiraditya Mayor
@everyone when are we going to start on the overleaf thing?
Nathaniel Chan — Yesterday at 5:14 PM
We've already started. U can check our progress on the shared link
Pranav Sood — Yesterday at 7:44 PM
So i've got the features.py working perfectly fine

[7:44 PM]
with relative imports
[7:44 PM]
a requirements.txt

Jyotiraditya Mayor — Yesterday at 7:44 PM
Pranav Sood — Yesterday at 7:45 PM
and a README.md and .gitignore

[7:45 PM]
it took 2 hours to fully complete lmao(edited)

Vaibhav Saini — Yesterday at 7:45 PM
guys, I am gonna go make some food for dinner ... see u guys in a bit
Pranav Sood — Yesterday at 7:45 PM
same same
Jyotiraditya Mayor — Yesterday at 7:46 PM
Pranav Sood — Yesterday at 10:38 PM
@everyone going to be in the discord tomorrow morning between 8 to 10 depending on sleep, but 10 at the latest

2

Anuj Rattan — Yesterday at 10:58 PM
K-Means_Report.docx
19.58 KB

[11:00 PM]
Hey guys, this is my typed up report for my model. This isn't a final copy just a rough draft and I'm open to opinions however here are some things I thought would be good to do. Don't list your scores, we have a whole section for that and Nathaniel Chan made some really cool tables in latex for that purpose Explore where your model excels but also where it sucks - be honest I haven't put images in I'm going to do that in LaTeX but it'd be good to plan around that
[11:01 PM]
If anyone has any advice or notes as to where I could improve please do say so! I'm looking forward to this report being dope
I converted my KNN code in models notebook to .py, if u guys want to check it out ... it creates about 9 plots (3 pca and 6 confusion matrix heatmaps)
-*- coding: utf-8 -*-
"""Copy of Models + KNN.ipynb
Automatically generated by Colaboratory.
Original file is located at
Expand
knn_model.py14 KB
August 17, 2021

Vaibhav Saini — Today at 11:01 AM
Hey guys, I gotta go ... be back in an hour

1

Pranav Sood — Today at 11:01 AM
ight pcee
Anuj Rattan — Today at 11:33 AM
Hey, I'ma go eat lunch so I'll be back soonish. DM me if needed
Jyotiraditya Mayor — Today at 11:34 AM
Pranav Sood — Today at 11:34 AM
Same, pce out guys
Jyotiraditya Mayor — Today at 11:36 AM
me too
Jyotiraditya Mayor — Today at 12:13 PM
@everyone
Pranav Sood — Today at 1:57 PM
https://discord.com/channels/847683500630212608/847683500630212611/875099178513072128
Pranav Sood — Today at 4:00 PM
hey gonna take a quick break

[4:00 PM]

brb

Nathaniel Chan — Today at 4:26 PM

I'll just mention that we haven't included everyone's written report yet, but we're at 13 pages

Nathaniel Chan — Today at 4:57 PM

I'll be moving some of the unsupervised learning preamble to the methods section, under the unsupervised learning section there, cause it looks like there's some discussion of methods in it

Nathaniel Chan — Today at 5:09 PM

https://www.bibme.org/bibtex

Pranav Sood — Today at 5:16 PM

Hey professor @Ghassan Hamarneh another question. We did all of our work on google colab since we wanted to try it out, and what better way than during our school project. It was quite good a resource to see everyones notebook, however it wasn't properly able to be integrated with git. And so there was no way to keep track of who did particular pieces of code. To circumvent this issue, everyone has made a notebook of their own model. Should we push these notebooks to GitHub as our commit for the work we did? Or would you prefer something else?

[5:18 PM]

Hey professor @Ghassan Hamarneh another question. We did all of our work on google colab since we wanted to try it out. It was quite good a resource to see everyones notebook, however it wasn't properly able to be integrated with git. And so there was no way to keep track of who did particular pieces of code. To circumvent this issue, everyone has made a notebook of their own model. Should we push these notebooks to GitHub as our commit for the work we did? Or would you prefer something else? As well we have already made a file into a python file to submit and inside we have given credit to each function that was taken from another member. How would you like us to proceed?(edited)

Pranav Sood — Today at 5:53 PM

Refers to how many times audio signal crosses the x-axis.

Pranav Sood — Today at 6:12 PM

pip install -r requirements.txt

[6:13 PM]

pip freeze > requirements.txt

Jyotiraditya Mayor — Today at 6:32 PM

@Pranav Sood were you not able to hear me? I heard you want a million dollars(edited)

Vaibhav Saini — Today at 6:32 PM

*billion

Nathaniel Chan — Today at 6:38 PM

So now we can reference subfigures properly using \ref{subfigure name}. I just realized that to fix this, we had to put \caption{...} before \label{...} in each subfigure

Pranav Sood — Today at 6:39 PM

So currently need to work on: Conclusion, abstract,Random Forest(edited)

Nathaniel Chan — Today at 6:40 PM

Yes, procrastinating a bit on Random Forest by working on other stuff, but I should probably get to it

Pranav Sood — Today at 6:42 PM

Accomplishments are done

[6:42 PM]

idk who did it though lmao

[6:42 PM]

but good job

Nathaniel Chan — Today at 6:43 PM

I just put it together and edited it

[6:49 PM]

@Vaibhav Saini I think you should probably fix this sooner or later

@Nathaniel Chan
Yes, procrastinating a bit on Random Forest by working on other stuff, but I should probably get to it

Vaibhav Saini — Today at 6:51 PM

[6:52 PM]

yea, better not let prof know about it

Vaibhav Saini — Today at 7:07 PM

yo, does anyone know how to put % sign in overleaf?

Anuj Rattan — Today at 7:07 PM

use the \ symbol

[7:08 PM]

%

Vaibhav Saini — Today at 7:08 PM

%?

Anuj Rattan — Today at 7:08 PM

\%

Vaibhav Saini — Today at 7:08 PM

I tried it... it coming as \% in compiled doc

[7:09 PM]

Oh wait .. fised it

Anuj Rattan — Today at 7:09 PM

weird worked for me

Vaibhav Saini — Today at 7:09 PM
fixed it

[7:10 PM]
thx

Jyotiraditya Mayor — Today at 7:24 PM
@everyone we also have to write abstract, make space

Vaibhav Saini — Today at 7:24 PM
bruhh

Pranav Sood — Today at 7:27 PM
Something to properly diagnose patients with in a medical setting

[7:28 PM]
to understand the differences between supervised and unsupervised learning in a medical setting on a classification problem

[7:30 PM]
@Anuj Rattan which direction do you think we should write about

[7:30 PM]
for the whole project

Anuj Rattan — Today at 7:30 PM
So I was just typing some stuff up to see

[7:31 PM]
Our group chose to work on this particular project because we had interests in learning how to apply ML models to audio data, what the benefits and downfalls were of particular methods, and we believed this would provide us with a challenge

Pranav Sood — Today at 7:33 PM
that could work but idk

Vaibhav Saini — Today at 7:33 PM
I guess add more spice to it...

Anuj Rattan — Today at 7:33 PM
Yeah, I'm trying to think of what goes into a good abstract

Pranav Sood — Today at 7:34 PM
To learn how to apply Machine Learning in a Medical Setting, using audio data.

Vaibhav Saini — Today at 7:34 PM
I guess we can focus explicitly on medical setting since thats the focus of the course

Pranav Sood — Today at 7:35 PM
Understanding the pros and cons of particular methods and finding real life applications of our models

Vaibhav Saini — Today at 7:35 PM
^^^

Pranav Sood — Today at 7:35 PM
To learn how to apply Machine Learning in a Medical Setting, using audio data. Understanding the pros and cons of particular methods and finding real life applications of our models

[7:35 PM]
How about this?

Anuj Rattan — Today at 7:36 PM
Alright, I'm gonna take all of these seperate things and throw them together into one coherent paragraph

Pranav Sood — Today at 7:36 PM
lmfaooo

[7:36 PM]
this way we hit on every point we need and the conclusion i have started is still relevant

[7:36 PM]
as well as all of our written stuff in general

Vaibhav Saini — Today at 7:36 PM
nice ... maybe talk about which type of learning we expect to do better ?

[7:37 PM]
or like which models might work better?

Pranav Sood — Today at 7:38 PM
As well as understanding the differeneces between unsupervised and supervised on a classification problem.

[7:38 PM]
? Maybe?

Vaibhav Saini — Today at 7:39 PM
yea that could come uder supervised v unsupervised section ig

Pranav Sood — Today at 7:39 PM
Or is that too many things to be looking at?

Vaibhav Saini — Today at 7:40 PM

cause that could form out conc as well, that we expected this to perform better but this happened or this didnt happen .. idk

Nathaniel Chan — Today at 7:43 PM

So I'm starting to realise almost all of us have repeated the same expectations and discussion on the test score: binary performs better than multi-classification & whole dataset performs better than augmented/non-augmented dataset

Pranav Sood — Today at 7:44 PM

Maybe we could put down an initial expectation

[7:44 PM]

at the top of the Model stuff

[7:44 PM]

being like all of us agreed that this would be the case

[7:44 PM]

?

Vaibhav Saini — Today at 7:44 PM

yea, maybe we should

Nathaniel Chan — Today at 7:44 PM

Yep, that's what I was thinking

Pranav Sood — Today at 7:44 PM

saves a tonne of space

[7:44 PM]

so that would be hyope

Vaibhav Saini — Today at 7:45 PM

yea just do that

Pranav Sood — Today at 7:49 PM

@Anuj Rattan hey im just about to convert model notebook to a python file

[7:49 PM]

do you need the model file for any reason

Anuj Rattan — Today at 7:49 PM

No, could you add my K-Means stuff in?

[7:49 PM]

I don't think I did

Pranav Sood — Today at 7:49 PM

its already there

[7:49 PM]

is it not?

Anuj Rattan — Today at 7:49 PM

not updated

Pranav Sood — Today at 7:50 PM

okay where is that code at?

Anuj Rattan — Today at 7:50 PM

https://colab.research.google.com/drive/1tcPin-yiV_CroDHCINhqmVSepBUmQiUR#scrollTo=hC0QIRuy9g85

Google Colaboratory

Anuj Rattan — Today at 8:04 PM

I just typed up a paragraph for abstract. If anyone wants to look it over please do.

Jyotiraditya Mayor — Today at 8:04 PM

will do

[8:06 PM]

looks good

[8:08 PM]

@everyone, since prof din't reply, I made a separate folder on github 'contributions' containing a folder with each members name. please push your ipynbs and py files in there to show your contribution(edited)

Jyotiraditya Mayor — Today at 8:27 PM

@everyone one more thing, README says that all are plots are in a plots folder, please add your plots there

Pranav Sood — Today at 9:18 PM

@Anuj Rattan Hey you gonna come back to your PC at all tonight?

Anuj Rattan — Today at 9:58 PM

Conclusion looks good

Jyotiraditya Mayor — Today at 10:08 PM

@everyone

[10:08 PM]

we haver to make a zip file and upload it at the end

Vaibhav Saini — Today at 10:08 PM

Organize the files in directories and provide a README file, then zip all and upload. Place all folders and files in a single folder and compress that single folder

Jyotiraditya Mayor — Today at 10:16 PM
@everyone, push everything, plots, code, etc... we gotta make a zip file
Anuj Rattan — Today at 10:19 PM
uploaded k-means and birch plots
Pranav Sood — Today at 10:24 PM
references
Nathaniel Chan — Today at 10:24 PM
forgot about that
[10:25 PM]
We probably don't need to include all of them if we don't cite them, but I guess more the merrier
Anuj Rattan — Today at 10:50 PM
2021-08-17_22-46-10.mkv
37.18 MB
[10:55 PM]
1
2021-08-17_22-46-10.mp4
6.32 MB
Nathaniel Chan — Today at 11:01 PM
Almost forgot, fill out the contributions spreadsheet
Pranav Sood — Today at 11:03 PM
?
[11:03 PM]
okk
[11:03 PM]
done
Nathaniel Chan — Today at 11:03 PM
Actually, that was just a reminder to myself cause I see most of us already did that