

Dear Employer,

This is my portfolio full of some of the code, machine learning, and data analysis work I have done. The work is from my internship with the Lindenwood Baseball team's Performance Science Team Internship and for presenting to the director of football operations for the Lindenwood Football Team for a possible internship opportunity. There are four folders each of which are labeled what they pertain to. The AmazonS3BucketCode was for the Performance Science Team internship as well. Some of the folders may also contain a test file (or files) of some sort along with the code. You may or may not be able to run the code do missing pieces to run it such as the database, access to the Amazon S3 bucket, and etc. which I no longer have access to or do not exist, but besides that the code should all work when given everything appropriately and you can still see how it works. There are comments throughout all the code files helping to explain what is going on as well. The data analysis for the football team was just data analysis I came up with on my own after manually inputting data and creating columns of data in Excel spreadsheets. The analysis covered analyzing the efficiency of the offense of the team as a whole in the pass and run game as well as breaking down the individual receiving production of each receiver in the pass game on the team. The other folders containing stuff related to the baseball team internship have 3 of the main parts of the project I worked on with the internship team. I also assisted in some other code and other parts, but do not have the code anymore. The three main things I worked mainly on were the pitch grading model, the database hookup to take pitches from files Rapsodo from the Lindenwood Baseball Team's Rapsodo account that were then inputted into the database in correct fashion, and the AmazonS3 Bucket Code that would allow our team to take videos of pitches from one end and transfer them back and forth to an Amazon S3 Bucket during the video editing process and then uploaded up to the website where needed. The last thing to note is there will be a ReadMe file to read before going into the code files and other files in every folder inside this portfolio that will give a quick summary of what is in the folder and what the code does.

Side Notes:

All of the code and data analysis files were created by me solely except for the pitching model code. Me and my intern team member Bennett created and worked on that code together. Also, some of the code involved packages/libraries in Python that I used that somebody else had already created. Lastly, the MLB data used for the pitch grader model was obtained from the Baseball Savant website ([Baseball Savant: Statcast, Trending MLB Players and Visualizations | baseballsavant.com](https://baseballsavant.com)).