Name: Suraj Sunil Pawar

Why are you interested in an internship at Tesla?

-> Tesla is a market leader in EVs with a goal to transition from fossil fuel-based economy to sustainable energy-based products. To be at the top of this market segment the engineers behind the product have to have out of box thinking and strong theoretical and practical knowledge. As a Computer Science student, I have developed a good foundation of problem-solving and algorithms over the past years and now I want to leverage those skills to contribute towards the company's success, at the same time learn from my peers to expand my skill-sets. For this purpose, I think Tesla is a perfect place to use as well as to hone my skills.

If you could work on anything data-related at Tesla, what would it be, why and how would you do it?
-> I would love to work with Data Engineer - Data Analytics team. As Data has proven to be the 21st century's fuel, it is equally necessary to utilize it to make a smart business decision. Joining this team will enable me to work on Enterprise Data Warehouse & BI platform within Tesla using various data & BI tools.

Currently, at the NC State Univerisity, I am pursuing a master's in Computer Science with specialization in Data Science track so I have taken courses such as Foundation of Data Science (statistics), Algorithms for Business Intelligence (Big data tools- Apache Spark, Kafka) and Data mining (Logistic models). All those courses, projects and internships have provided me with the required skill-set to be part of this team.

What is the accomplishment you are the proudest of?
-> Winning my very first hackathon is the accomplishment I am most proud of because from there I get to know how technology can be used to make a positive change in society.
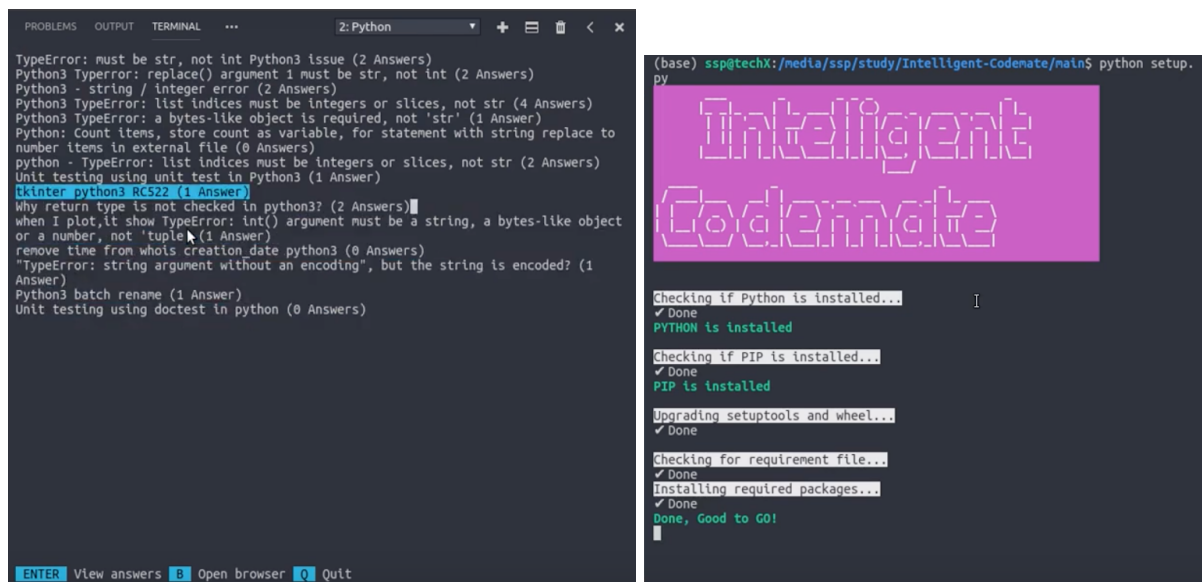
After my sophomore year of Bachelor's study, we had participated in a team of 4 in the Hackathon organized by the NGO who work for poor child welfare where we developed a web-application using (not so cool) tech stack of PHP, Bootstrap. Our idea was to develop an application where all hotels in a certain location can volunteer to share their remaining food which otherwise goes into the garbage. It was basically a CRUD application where hotels can add how much kg of food they want to share with NGOs so after that NGO volunteers can go to that hotel and distribute that food to children in need.

From that experience, I get to learn about the importance of team working, reach of technology and how technology can impact society. After winning that hackathon I got motivated and started playing with technology.

Can you share the piece of code you wrote that you are the most proud of (less than 100 lines)?

-> I had developed a terminal-based debugging tool using Python where I had used automation plus some Natural language processing to simplify the programmer's work. So basically my application will extract any error thrown by a program on execution if there is any, then it will search for all the possible solutions over the StackOverflow website. All the possible solutions will be weighted as per their relevance to the original error, numbers of upvotes it has received then top 5 solutions will be presented on the terminal so users do not have to leave working space and it helps in increasing productivity and reduces the chances of distraction.

I have shared a link to one file titled App.py (https://github.com/ssp4all/Intelligent-Codemate/blob/master/main/App.py) which was used to design an interface for the displaying all solutions. The main challenge I faced was while designing a user interface using a python library called URWID because designing a good interface is far more important that the backend features. My aim was to keep it minimal and the user should be able to guess the feature rather than referring documentation for it.

Screenshots of my application (YOUTUBE)