

## 1. Tell us about yourself.

Hello sir/madam

My name is mamalesh hake.

I am pursuing Btech in Electronics Engineering at IIT BHU.

I have completed my 12th with science stream from FIITJEE JUNIOR COLLEGE Hyderabad.

I have done my schooling from scottish academy parbhani, my home town is also parbhani maharashtra

My strengths are i am self-motivated, hard working, and honest.

My hobbies includes listening to music, solving puzzles and cycling.

I always like take part in various competitive competitions and to challenge myself and improve.

My short-term goal is to improve my skills and apply my knowledge in practice.

That's all about myself.

"Sure. I am currently a BTECH at iit bhu, in electronics engineering.

Throughout my academic journey, I have consistently maintained a strong academic record my last sem spi was 9.52 and have been recognized for my dedication to learning .

Outside of the classroom, I have actively engaged in extracurricular activities. I have been involved in cpq where I have had the opportunity to mentor the juniors about cp.

In addition to my academic and extracurricular pursuits, I have gained experience through projects and competitions. For instance, I was part of technical team for different events at institute, i took part many competitions and achieved great success and there I had the chance to apply my classroom knowledge to real-world projects and further develop my skills.

I am passionate about sde/da and have a strong desire to make a positive impact in this area.

In my free time, I enjoy listening to music, solving puzzles and cycling . I believe these activities help me maintain a healthy balance between my academic and personal life.

Overall, I believe my academic achievements, involvement in extracurricular activities, and experiences have equipped me with a diverse set of skills, a strong work ethic, and a drive to succeed. I am eager to bring my enthusiasm, dedication, and willingness to learn to a dynamic and challenging environment like [company/organization name]."

## **2. What are your strengths and weaknesses?**

My biggest weakness has always been my communication skills. I've been pretty shy and anxious as a kid. Over the years, however, I've been really working on the issue.

At this stage, I'm much better than I've ever been, but I'm still far from perfect.

This, however, won't have any impact on my job as a programmer. Despite lacking communication skills, I'm very good at working in a team.

I'm also highly organized and detail-oriented. I have a systematic approach to tasks, and I pay close attention to the finer details to ensure accuracy and quality in my work. This helps me stay on top of deadlines and deliver projects effectively.

Furthermore, I consider myself a strong problem solver. I enjoy analyzing complex situations, identifying challenges, and finding creative and practical solutions. I'm comfortable thinking outside the box and collaborating with others to tackle problems from different perspectives.

## **3. If you could be an animal for a day, who would you want to be and why?**

I would like to be a bird. Because i like the patience and focus the birds have while building their nest. And the birds attitude towards life is also much inspiring be it a rainy day or hot summer birds always searching for food and water. Birds also have great team work we can see in the sky some birds always fly in folks with a pattern.

## **4. Describe yourself in three to five words.**

I am loyal, competitive, hard working, passionate, cautious guy.

## **6. What motivates you?**

I think i love to analyze the things. coming up with creative ideas to improve something, or make something new.

I find motivation in setting ambitious goals and working diligently to accomplish them. The satisfaction of seeing a project come to fruition or overcoming challenges along the way fuels my drive to continuously push myself and exceed expectations.

Additionally, I am inspired by learning and personal growth. I embrace new challenges and seek opportunities to expand my knowledge and skills. I thrive in environments that foster learning and development, as it allows me to constantly improve and bring fresh ideas to the table.

Collaboration and teamwork are also powerful motivators for me. I enjoy working alongside talented individuals who share a common vision. Being part of a supportive and collaborative team energizes me and drives me to deliver exceptional results.

Furthermore, I am motivated by the chance to contribute to a purpose-driven organization that aligns with my values. I am passionate about [mention a specific cause or industry], and being able to work towards creating positive change in that field is incredibly fulfilling for me.

Ultimately, what motivates me is the opportunity to have a meaningful impact, continuously grow both personally and professionally, collaborate with others, and contribute to a greater purpose. I believe that when you are passionate about what you do and driven by a sense of purpose, you can achieve remarkable things."

## **8. Do you work better alone or as part of a team?**

I've worked both in groups and independently, and I've found that I can focus much better on the task at hand when I work independently. I've always been someone who needs peace and quiet in order to concentrate and perform well. If it's too noisy or there's too much going on around me, I can't formulate my thoughts well. My teachers have told me that I work best aerobically. That means that I work hard and fast (and solo), like a runner working out on a treadmill.

## **9. Where do you see yourself in five years?**

After 5 years, I see myself as a valuable employee and a more knowledgeable person contributing to the growth of the company.

I wish to become an expert in my field and take up a bigger role in the company. I see myself managing a team effectively.

"In five years, I see myself as a [position or role] who has made significant contributions to the company and has grown both professionally and personally. I believe in setting goals and working diligently to achieve them, and I have a clear vision of where I would like to be in my career.

Firstly, I aim to have developed a strong expertise in [specific area or skill relevant to the position or industry]. I see myself as a subject matter expert, continuously learning and staying updated with the latest industry trends and best practices. I want to be known for my deep knowledge and ability to bring innovative solutions to the table.

Secondly, I aspire to take on more leadership responsibilities. I see myself in a position where I can mentor and guide others, leveraging my experience and expertise to help them

grow in their own careers. I believe in the power of collaboration and creating a positive and supportive work environment.

Additionally, I see myself actively contributing to the growth and success of the company. Whether it's through leading major projects, driving strategic initiatives, or identifying new opportunities, I want to play a pivotal role in helping the company achieve its goals and maintain its competitive edge.

Furthermore, personal growth and development are important to me. In five years, I envision myself having expanded my skill set, perhaps through additional certifications or advanced training. I will continue to seek out learning opportunities and develop new skills that contribute to my effectiveness and value as a professional.

It's worth noting that while I have a clear vision for my future, I also understand that the path may evolve as I gain more experience and as the industry landscape changes. I am open to new opportunities and challenges that come my way and remain adaptable to embrace different career paths.

Overall, my aim is to make a positive and lasting impact in my chosen field, continually grow and develop as a professional, and contribute to the success of the organization I work for."

I believe that this company will be able to help me to achieve these goals as you believe in the improvement of your employees and even support them in achieving their goals.

## **10. What was the last book that you read?**

The last book i read was deep work.in that book author described in the today's world the all replicable task can be replaced by ai technology so that type of work will not have any value. So author say that only three type of people will survive in any industry these includes who will work on ai technology, those who have deep knowledge of field in which they work, those who owns assets in the industry. So he says to become second type one we need to work which can not be replicated so he said for this type of work deep work is needed in tha we workProfessional activities performed in a state of distraction-free concentration that push your cognitive capabilities to their limit. These efforts create new value, improve your skill, and are hard to replicate.

## **11. Who has inspired you the most and why?**

I think david goggins has inspired me a lot. After going through his life how he build his character from worst situations and i like his motto of staying outside the our comfort zone and challenge our limits.

You can do anything if you have the right mindset, You can endure more than you think is possible.

## **12. How do you deal with criticism?**

"I view criticism as an opportunity for growth and improvement. I understand that feedback, even if it may be challenging to hear, can provide valuable insights and help me enhance my skills and performance.

To effectively deal with criticism, I follow these steps:

Stay calm and listen actively: I make an effort to remain composed and attentive while receiving feedback. I give the person providing criticism my full attention and try to understand their perspective without becoming defensive.

Seek clarification: If the criticism is not clear or I need more information to fully comprehend it, I ask questions to gain a better understanding. Seeking clarification demonstrates my willingness to learn and address any concerns raised.

Reflect and evaluate: Once I have absorbed the feedback, I take the time to reflect on it. I assess whether the criticism is valid and identify areas where I can make improvements. I consider the feedback as an opportunity to enhance my skills, knowledge, or work processes.

Develop an action plan: After understanding the areas that require improvement, I create a plan of action. I set specific goals and outline steps I can take to address the feedback and enhance my performance.

Seek support and guidance: If necessary, I reach out to mentors, supervisors, or colleagues who can provide guidance or support. Their insights and experience can help me navigate through the criticism and implement effective strategies for improvement.

Maintain a growth mindset: It's important for me to remember that criticism is not a reflection of my self-worth but an opportunity to grow. I embrace a growth mindset, which means I believe in the capacity for personal and professional development through learning and perseverance.

By adopting this approach, I can transform criticism into a catalyst for personal and professional growth, continuously striving to improve and deliver better results."

## **14. Which is more important – salary or work-life balance?**

A higher salary can provide financial security, allowing individuals to support themselves and their families, fulfill their financial goals, and have a comfortable lifestyle. It can also be an indicator of recognition and value in the job market. Salary considerations are particularly crucial when individuals have financial responsibilities, such as paying off debts, supporting dependents, or pursuing specific long-term financial goals.

## 15. What are your career goals?

"My career goals are focused on continuous growth, learning, and making a positive impact. I aspire to develop and refine my skills in [specific area or industry] and take on increasingly challenging roles that allow me to contribute meaningfully to the organization and the larger community.

I aim to expand my knowledge and expertise through professional development opportunities, such as attending workshops, pursuing relevant certifications, and seeking mentorship. By staying updated with industry trends and advancements, I can bring innovative ideas and solutions to my work.

Additionally, I value collaboration and teamwork. I aspire to work in an environment that fosters collaboration, encourages diverse perspectives, and promotes a culture of learning. I believe in leveraging the strengths of a team to achieve collective goals and deliver exceptional results.

Ultimately, I want to make a positive impact in my chosen field. Whether it's through improving processes, developing sustainable solutions, or creating value for customers and stakeholders, I strive to leave a lasting mark and contribute to the success of the organization I work for."

## 16. Do you have any questions for me?

What is the management style like within the organization?

How does the company support work-life balance and employee well-being?

Can you tell me more about the company culture and values?

What opportunities are available for professional development and growth within the company?

## Projects

### 1. Coin bazaar:

The project is build under **devfolio hackathon** which organized under **udyam iit bhu**.this a **full-stack website** for this **financial brokerage company**. Its primary objective was to facilitates the **buying and selling of financial securities**, such as **stocks, bonds**, and mutual funds, on behalf of its clients.

As a member of the development team, my role was primarily focused on **front-end** development and user interface design. I collaborated with the back-end to integrate the front-end functionalities and ensure a seamless user experience. I also took the lead in conducting testing to refine the system's usability

We have used react js for frontend and nodejs for backend and integrated different api for fetching the current market info

The major features of the project includes

**User Registration:** Allow users to create accounts and authenticate themselves securely.

**User Profile:** Enable users to manage their personal information, including preferences and settings.

**Real-time Data:** Integrate a reliable stock market data provider to ensure users receive up-to-date information on stock prices, volume, charts, news, and other relevant data.

**Trading Interface:** Develop a user-friendly interface that allows users to execute buy and sell orders for stocks. It should include features such as market orders, limit orders, stop orders, and order history.

**Portfolio Management:** Provide users with tools to manage their investment portfolios, including tracking their positions, viewing gains/losses, and generating performance reports.

**News and Insights:** Provide access to real-time market news, analysis, and insights to help users make informed trading decisions.

We got 3rd rank in the hackathon

I learnt the value of team work and not giving up till last moment things from this project and remaining updated is very important we got to know that the api which we were using stopped working for some

## 2.SMART ATTENDANCE SYSTEM

This was my expo project under prof dr p r muduli . in this project we attempted to solve the problem related to attendance in university.we aim to solve the problem of taking attendance in colleges by automating the process, which is currently a time-consuming and error-prone manual process. Our system employs face recognition technology to identify the students and mark their attendance while at the same time checking for proxies through liveness detection.

In this project we have used FaceNet - Deep Learning Model for face identification, OpenCV - Python framework used for Image Processing, Face\_Recognition and python for integrating all this.

Photos are taken from device camera and the model is trained on it

Dlib's Histogram of Oriented Gradients Technique is Used

FaceNet for Face Identification. It uses triplet loss function (refer to Fig 1). In order to calculate the triplet loss, we need 3 images namely anchor, positive and negative SVM Classifier is used to query the database rapidly. In an SVM classifier, data is represented as points in a high-dimensional space, where each point corresponds to a feature vector representing the object

Liveness detection using blinking of the eye: To detect the presence of the candidate and not just a mere photo of him, liveness detection is employed through blinking of the eye. This is done by taking the Eye Aspect Ratio into account. Eyes are represented as 6 points the by face\_recognition algorithm

We tested this our project on around 30 students it is able to perform correctly in more than 90% of cases.

Attendance detected either through mobile camera, RasPi cam or laptop as per convenience

### 3.EES TECH TEAM

This was a team project which was a full stack website for electronic engineering society and all the events, competitions coming under the society. So basically this website was the backbone for our society which helped society to organize different competitions gave student notifications about upcoming events, registering for events, giving info about competition etc

As a member of the development team, my role was primarily focused on **front-end** development and user interface design. I collaborated with the back-end to integrate the front-end functionalities and ensure a seamless user experience. I also took the lead in conducting testing to refine the system's usability

We used react js for frontend and django for the backend

This was big project it took 6 months for us to develop the site there were 14 people working on this project

Finally we successfully able to create the site which was backbone of all the events organised

### 4. Diagnosis Of Lung Condition

to perform diagnosis of the patient's lung condition—wheezes and crackles—through the use of a computer vision (machine learning) algorithm.

We are provided with the audio file and text file the audio file contains the respiration cycles of patients recording and text file contains the from which timestamp the patients respiration cycle



starts and ends in the audio file and the target variables that is patient is having wheezes and crackles

So at the start of the project first target was to convert the audio data into numerical data for analysis so i have used librosa library for this purpose .

after that the second target was to fragment the audio file according to respiration cycle starting and ending i have done this by simply using array partitions

Next thing that was giving problem was that each person having different length of respiration cycles so we need to convert the length of respiration cycle to equal for all the people so that we can feed that to machine learning model as a same sized data. for this i have used Mel-frequency cepstral coefficients which is the technique used for feature extraction from audio data. So i applied this on the given audio data.

After this i converted the given data to same sized images using opencv and i labeled all images as presence and absence of wheezes and crackles and after that i trained a model of cnn on that image by using label as target variables.

After the training and testing i got approx 80% accuracy on the given model.

## Por

### 1.ees tech team

My position here was web coordinator for the electronic engineering society and all the event and competitions coming under it . i worked as frontend developer for the project and also coordinated the project. We used react js in front end and django for backend in this project

I got to learn many things from this position which includes team work, management of deadlines and experience of real life project

### 2.member of cpg

First of all cpg is a competitive programming group which is part of cops iit bhu. The club includes top 25 competitive programmers of the college. There are many activities that happens under the group which includes organising different session on competitive programming which will help freshers to begin their cp journey and increase interest about cp in them. There was one event intro to cp organised by group in that we were assigned 5-7 freshers and we have teach them a beginner friendly cp topic and we have guide and mentor them in their journey for about cp.

There are also many competitions/contest organised under cpg which includes csoc,cpg selection tests, etc i was actively involved in problem setting/selecting process also

It was great experience working for it. It improved my communication skills , presentation skill, teaching skills, coming up with the counter cases,etc.

Oops

<https://www.youtube.com/watch?v=m1fJjNLzRag&pp=ygURb29wcyBpbiBvbmUgdmlkZW8%3D>

