**Project 1(Reliance) ML and Analytics:**

**Task:**  
The process of analyzing and identifying the **exact cause** used to take over a week—done manually through disparate logs and customer inputs. This delay **negatively impacted customer experience** and retention, and limited the ability of engineers to take timely action.

**Action:**  
I proposed building a **machine learning-based diagnostic system**. I collected and cleaned a **month's worth of network performance and complaint data**, and trained a **Random Forest classifier** (after comparing it with Decision Trees and Logistic Regression) to predict the **probable root cause** of a network failure based on real-time parameters.

The model was trained using features like signal strength, frequency bands, error rates, device health, and congestion indicators. Once deployed, it was integrated into a lightweight tool that flagged **root causes instantly** and **recommended next actions**, reducing decision latency.

**Result:**  
The model achieved **87% accuracy** in identifying root causes and reduced root cause detection time from **7+ days to under 2 hours**. This not only boosted engineering productivity but also led to a **12–15% improvement in customer satisfaction** (measured via feedback trends and reduced repeated complaints).

**Bonus Line (Vision Hook):**  
This experience taught me how data science can **directly impact the customer experience at scale**, and I’d love to bring this mindset into the energy sector at Street, where smart anomaly detection could redefine grid reliability and service uptime.

**How You Can Address a Gap in Street Simplified’s Tech Advancement**

While Street Simplified is solving a **critical problem with video analytics to prevent crashes**, I see a few **scalable opportunities** where I could contribute meaningfully:

* **Geographical Limitation**: Most of the current deployments and datasets seem to be **focused in Western countries**. Having grown up and worked in India, I understand the **unique traffic patterns, infrastructure challenges, and road behaviors** here. I could help **localize and retrain models** to work accurately on Indian traffic camera feeds, which often involve **dense, chaotic, and low-resolution data**.
* **Data Diversity & Edge Cases**: Crash causality varies widely by geography. I could help **expand training datasets**, including edge cases like 2-wheelers, jaywalking, and informal pedestrian crossings—which are common in developing nations. This would make the solution **more globally adaptable**.
* **Real-Time Edge AI on Low-Resource Devices**: In many countries like India, deploying high-end Nvidia GPUs at every intersection isn't feasible. I can assist in **optimizing models to run on edge devices**, using lightweight architectures like **MobileNet**, **YOLO-Nano**, or even **TensorRT conversions**. My background with **PySpark + automation** also supports data management even on constrained environments.
* **Scalable Backend/Automation Systems**: Coming from a background where I’ve built automation pipelines in PySpark and deployed systems on cloud, I can help **optimize the processing pipeline** — from data ingestion to model monitoring — and make it **more scalable, cost-efficient, and modular**, especially when handling video at scale.

By contributing in these areas, I believe I could help Street Simplified not just **scale across countries like India**, but also **adapt its technology to more diverse and complex environments** — ultimately saving more lives across boundaries

### ****What is your experience with cloud platforms like AWS?****

**Pro Answer:**

I’ve used AWS EC2 for model training, S3 for storing datasets and models, and Lambda for triggering events like data cleansing when files are uploaded. I’m also familiar with IAM for access control and RDS for structured SQL storage.

For example, I automated report generation by triggering Lambda on new S3 uploads and storing results in RDS, monitored via CloudWatch.

yoga

Talk about some purpose driven projects like Connect and Yoga

**S – Situation**

During the rise of home workouts during the pandemic, I noticed a growing interest in at-home fitness apps. However, most solutions lacked real-time feedback on body alignment. As someone interested in both health and technology, I decided to build a **Yoga Posture Detection system** to provide instant feedback on pose accuracy using just a webcam.

**T – Task**

My goal was to **build a real-time, low-latency system** that could:

* Detect a user's yoga posture through their webcam
* Classify whether the posture was correct or incorrect
* Offer basic feedback to guide correction

I wanted it to be lightweight enough to run on **consumer laptops without a GPU** and intuitive for non-tech users.

**A – Action**

I broke the problem down into several components and took the following steps:

1. **Pose Estimation with MediaPipe**:
   * Used **Google's MediaPipe library** to extract 33 body landmarks (like shoulders, hips, knees).
   * Captured **live video feed** using OpenCV and processed frame-by-frame for keypoints.
2. **Feature Engineering**:
   * Calculated **angles between key joints** to define pose alignment (e.g., for Trikonasana, Warrior Pose).
   * Normalized the data to be **scale and distance invariant** so it worked across different body types and camera positions.
3. **Model Training**:
   * Collected a dataset of **labeled yoga postures** (correct and incorrect poses).
   * Trained a **Random Forest classifier** and later experimented with a lightweight **CNN** for classification.
   * Used **cross-validation** to ensure generalization.
4. **Real-Time Feedback Loop**:
   * Integrated logic to provide **real-time visual/audio feedback** using color overlays (green = correct, red = incorrect).
   * Streamlined processing to maintain **>15 FPS latency** on a standard laptop.
5. **User Interface**:
   * Built a clean **Streamlit interface** so users could access the system via browser.
   * Included metrics like **pose name, confidence score**, and tips for correction.

**R – Result**

* The system achieved **~90% accuracy** across five common yoga postures.
* It ran **smoothly in real-time**, even on low-spec machines, without GPU acceleration.
* I received positive feedback from testers for **ease of use, visual clarity, and practical value**.
* This project strengthened my skills in **computer vision, real-time inference, feature engineering**, and **interface design** — all while solving a meaningful real-world problem.

**✅ Bonus (Reflection/Impact)**

This project taught me how to convert noisy real-world data (like webcam feeds) into meaningful insight. It deepened my interest in **human-centric AI** and **real-time edge applications**, both of which align with what Street Simplified is doing in crash analytics.

connect

During my academics, I had developed an application called **Connect**, which aimed to bridge the gap between **specialized educators and children with disabilities**. It was a small initiative but purpose-driven, and it made me realize how much I enjoy building tech that creates **real-world impact**. Whether it’s accessibility, safety, or inclusion—I’ve always been motivated to work on **solutions that serve a meaningful purpose beyond just code.**

**I naturally take ownership. If something’s stuck or inefficient, I jump in. In my current role, I wasn’t assigned automation initially — I initiated it because it mattered. It saved hours weekly for the team and made processes cleaner.**

**I’m adaptable. Whether I need to lead, support, or just listen — I adjust to what the team needs. I believe great teams win because people know when to step up and when to step back.**

Tools like Notion and simple team dashboards help keep everyone aligned without micromanaging.

### ****Describe a time you worked in a team.****

**Answer:**

In a cross-functional project at Jio, I worked with the network team to automate outage reporting. While they had domain knowledge, I brought in data automation. I listened, translated their needs into code, and we delivered a solution that reduced manual work by 80%. It showed me the power of combining perspectives.

### 🧠 ****2. How do you handle conflicts in a team?****

**Answer:**

I stay calm, listen actively, and focus on the problem—not the person. In college, two teammates had differing views on our tech stack. I suggested a short prototype sprint to test both, and we chose based on results. It kept things objective and productive.

### 🧩 ****3. How do you contribute to team success beyond your assigned work?****

**Answer:**

I naturally take ownership. If something’s stuck or inefficient, I jump in. In my current role, I wasn’t assigned automation initially — I initiated it because it mattered. It saved hours weekly for the team and made processes cleaner.

### 💬 ****4. How do you ensure clear communication in a team?****

**Answer:**

I always prefer clarity over assumptions. I summarize goals, set checkpoints, and overcommunicate if needed. Tools like Notion and simple team dashboards help keep everyone aligned without micromanaging.

### 🙌 ****5. What’s one quality that makes you a good team player?****

**Answer:**

I’m adaptable. Whether I need to lead, support, or just listen — I adjust to what the team needs. I believe great teams win because people know when to step up and when to step back.

Let me know if you'd like these in **flashcard format** or in **STAR format** (Situation-Task-Action-Result) for deeper interview prep.

Is this conversation helpful so far?

Top of Form

Bottom of Form

Introduction:

**Hi, I’m Sheetal Chaudhary. I currently work as a Data Analyst at Jio Platforms, where I handle large-scale data pipelines using PySpark, Python, and SQL. I’m someone who takes full ownership whether it’s automating reporting systems, optimizing code for performance, or delivering insights that actually drive decisions.**

My strengths are speed of learning, structured thinking, and my bias for execution. If something’s broken or inefficient, I don’t wait — I fix it, and I scale it. One area I’ve actively worked on is balancing perfectionism with smart prioritization.

I’m not just relying on past skills — I’m constantly leveling up. I’m currently pursuing a PG program in Artificial Intelligence and Machine Learning through distance learning, while also working full-time. My goal is clear: to build solutions that solve real problems, not just write code that looks good on paper."