**Sample Motivation and Problem Statements**

**Sample # 1**

In most universities, student attendance identification is now done manually using paper, pencil, and other antiquated tools where students write or sign their names next to them. This technique is time-consuming and unproductive since it is sometimes difficult to update student records, store and maintain such information, and calculate attendance percentages for test reasons. The mechanism used to identify student attendance does not track individual attendance records over time [14]. Furthermore, since the essential data for these records are collected so that the motivation for retaining student attendance records is undermined, data from these records are often fraudulent, inaccurate, and not legitimate. False attendance and impersonation are made extremely simple due to the present procedures utilized for obtaining and preserving data on student attendance. Students find it very easy to put their friends’ identities on the attendance sheet without the teacher or any other official in charge detecting it.

In most cases, instructors have to deal with an empty classroom and an overflowing enrollment list. In most cases, absentee students attend courses for the first few weeks before dropping out and ask their regular classmates to sign their absence slips for them. There isn’t enough time for lecturers to go over the attendance list one by one since they are too busy lecturing and checking students in [15]. Lack of an actual attendance list, as well as fraudulent attendance lists, have huge ramifications. Teachers have a tough time identifying actual lecture attendees or compiling accurate data on student attendance for record-keeping because of the University’s current ineffectiveness at tracking students’ attendance. Furthermore, with these inadequate student attendance-taking systems, impersonations during tests are also exceedingly difficult to detect. According to Stripling et al. [15], the consequences of non-attendance influence students’ overall performance and the classroom community as a whole.

Class failure and instructor morale suffer when students fail to show up, and learning standards are lowered as a result. Additionally, class attendance decreases as the semester goes, especially on certain days of the week like Friday, as the weekend approaches. When students forget or lose their examination cards during semester exams, neither the students nor the school officials have any physical proof that they had the requisite percentage of attendance to be permitted to sit for the test. A fingerprint biometric identification system, on the other hand, might easily overcome these minor difficulties, preventing many students from skipping exams. Olaniyi et al. [16]confirmed this. Candidates’ decreased self-development abilities and confidence in reading and writing exams are being harmed by the rising occurrence of examination impersonation among students in higher education institutions. Despite many tactics used by stakeholders to guarantee that applicants complied with test standards, it had a detrimental impact on Nigeria’s educational system [17] With the emphasis on certificates these days, students in Nigeria are more likely to participate in criminal acts like skipping classes or boycotting school as a means of obtaining their desired outcomes.

While authorities at the University have made concerted efforts to address issues such as a lack of effective student attendance records and student impersonation by, for example, providing attendance registers for roll calls, the threat persists, with disastrous results for students, the University, and society as a whole. That’s why we carried out our research to create a biometric fingerprint that students can use. This study was undertaken to help us do just that.

**Sample #2:**

**Step 1: Contextualize the problem**

A family-owned shoe manufacturer has been in business in New England for several generations, employing thousands of local workers in a variety of roles, from assembly to supply-chain to customer service and retail. Employee tenure in the past always had an upward trend, with the average employee staying at the company for 10+ years. However, in the past decade, the trend has reversed, with some employees lasting only a few months, and others leaving abruptly after many years.

**Step 2: Show why it matters**

As the perceived loyalty of their employees has long been a source of pride for the company, they employed an outside consultant firm to see why there was so much turnover. The firm focused on the new hires, concluding that a rival shoe company located in the next town offered higher hourly wages and better “perks”, such as pizza parties. They claimed this was what was leading employees to switch. However, to gain a fuller understanding of why the turnover persists even after the consultant study, in-depth qualitative research focused on long-term employees is also needed. Focusing on why established workers leave can help develop a more telling reason why turnover is so high, rather than just due to salaries. It can also potentially identify points of change or conflict in the company’s culture that may cause workers to leave.

**Step 3: Set your aims and objectives**

This project aims to better understand why established workers choose to leave the company. Qualitative methods such as surveys and interviews will be conducted comparing the views of those who have worked 10+ years at the company and chose to stay, compared with those who chose to leave.