**Project Batch Details**

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| **Reg. No of Students** | **Name of the student** | **Batch Number** | **Guide Name** |
| **18B91A12F7** | **Varigonda Sai Nirmal Vignu** | **18** | **Sri P.R.S.S.V. Raju** |
| **18B91A12F9** | **Vasanth Chelpaka** |
| **19B95A1212** | **Pathiwada Venkata Sita Ramaswamy Naidu** |
| **19B95A1205** | **Gadiraju Pavan Kumar Varma** |

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| **Details of Project Proposal (Accepted)** | |
| **Title of the Project Proposal** | **Insurance Claim Fraud Detection** |
| **Abstract** | Insurance fraud is one of the major problems facing many insurance companies of the world and some loopholes during the traditional manual fraud investigation process have been identified as a major culprit. This is one of the motivations for this research, to deploy computing techniques in creating a barrier to fraud claims to not only provide a trustworthy environment to the customers, but also to reduce the percentage of such illegal fraud activities to a greater extent. We presented our research by automating the whole insurance claiming process using different technologies in its design, development, and implementation |
| **Problem Statement** | Fraudulent claims can be highly expensive for insurers. Therefore, it is important to know which claims are correct and which are not. It is not doable for insurance companies to check all claims personally since this will cost simply too much time and money.  Insurance fraud detection is a challenging problem, given the variety of fraud patterns and relatively small ratio of known frauds in typical samples. While building detection models, the savings from loss prevention needs to be balanced with the cost of false alerts. Machine learning techniques allow for improving predictive accuracy, enabling loss control units to achieve higher coverage with low false positive rates.  A comparison study has been performed to understand which ML algorithm suits best to the dataset. We are able to cut losses for the insurance company. Less losses equates to more earning. |
| **Existing Problem** | Traditionally, insurance companies have been relying on expert judgment of agents, adjusters, and special investigation units to detect and deal with frauds. This approach worked to a certain degree in the past as the agents of fraud themselves were not as evolved as they are now. Also, the number of claims were relatively small which made it humanly possible to keep a track on fraud. |
| **Proposed System** | The system used machine learning and data analytics to automate the process of identifying fraudulent claims and can develop heuristics  around fraud indicators. Thus, implementation of this model has a good impact on insurance company’s reputation in the market and on the customer’s satisfaction. |
| **Technology using** | Python Frameworks, Machine Learning |