

## **PS-II - ONE PAGE SUMMARY**

**PS-II (Internship or Thesis)** : Thesis

**Name of PS-II Station** : Bml Munjal University

**Details of PS-II Faculty Mentor** : Dr. Shilpa Mahajan

**Details of PS-II Industry Mentor** : N/A

**Name of the Student** : Yash Agrawal

**Student Enrolment No.** :230745

**Student University Email ID** :yash.agrawal.23cse@bmu.edu.in

**Time span of PS-II Project in weeks** : 8 weeks

**Title of the PS-II Project** : Finding Best Machine And Deep Learning Models in Medical Field

**Objective(s) of the project** : Finding out which machine and deep model is best in medical field

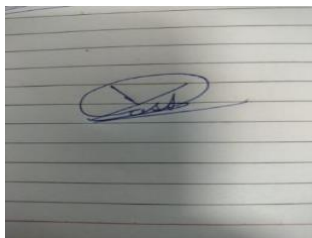
**Tool used (H/w, S/w)** : Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, TensorFlow/Keras

**Short Summary of work done during PS-II:** Conducted end-to-end processing of two medical datasets consisting of performing data acquisition, preprocessing, and exploratory data analysis (EDA), followed by using machine learning models for establishment of baselines. More fine-tuned and created deep learning models using TensorFlow/Keras with optimized classification performance and healthcare application inferences

**Major Learning Outcomes from PS-II:** Gained extensive practical knowledge in end-to-end machine and deep learning pipelines involving data preprocessing, EDA, feature engineering, and model development. Had first-hand experience with ML algorithms and deep learning architectures in Python utilizing Scikit-learn and TensorFlow/Keras. Enhanced understanding of hyperparameter tuning, metrics of performance, and real-world nuances in healthcare data analysis.

**Name of the Academic Courses Relevant to the PS-II Project:** Machine Learning

**Details of Publications/patents (if any):**N/A



**Student Signature**

**Faculty Mentor Signature**