**Project Title:**

**Student Career Prediction Based on Academic & Personality Data**

**Abstract:**

In the evolving landscape of career planning, aligning student potential with the right professional path is crucial. This project, *Student Career Prediction Based on Academic & Personality Data*, leverages predictive analytics and artificial intelligence to recommend optimal career domains. It processes diverse inputs such as higher secondary stream and marks, UG degree (e.g., BCA), CGPA, technical and interpersonal skill ratings, project experience, and declared interests.

The system utilizes machine learning classifiers and artificial neural networks (ANNs) to predict best-fit career tracks. A skill gap analysis module identifies deficiencies and suggests personalized upskilling strategies, including targeted courses and projects. A domain-specific NLP-powered chatbot answers real-time queries related to qualifications, career paths, and expected CTC ranges. A built-in history module maintains logs of user predictions for progress tracking.

A dedicated **Learning Page** enhances the system by offering detailed career descriptions, structured roadmaps, in-demand skills, essential tools, and curated resources for each suggested domain, empowering students to take actionable steps toward their goals.

The solution integrates PyQt5, Scikit-learn, Keras, MySQL, Matplotlib, and Seaborn for seamless functionality and intuitive analytics.