

Yugesha Chanddra Krishnamurthy

## Statement of Purpose

In the current data driven business scenario and fourth industrial revolution, data has become one of the most critical aspects that help a business make an informed and data-driven decision which yields fruitful results. Be it a social media platform which needs to keep its users engaged or an e-commerce app which trying to sell more products to its consumers. For any business to be successful in this digital era and to deliver the best products to its consumers, data has become a vital aspect.

The ability to analyze, interpret, and leverage data has become a pivotal skill, driving innovation and decision-making across all sectors and Data Science is emerging as a critical discipline that harnesses the power of data to solve complex problems and create a competitive edge. Data science is a multidisciplinary field that uses scientific methods, processes, algorithms, and systems to extract knowledge and insights from structured and unstructured data.

At its core, data science is about solving problems and predicting outcomes. By analyzing data, data scientists can identify patterns and trends that would otherwise go unnoticed. This capability is crucial across various sectors. Data Science enables organizations to make evidence-based decisions, reducing the risk of reliance on intuition or assumptions. By analyzing historical data, predictive models can forecast trends and outcomes, allowing businesses to strategize effectively. For example, in my current job as a Solution engineer, I handle lot of IIoT data from large oil & petrochemical industries where I build data pipelines to extract, process, transform unstructured data into contextualized information which then served to dashboards and visualizations to determine Key Performing Indicators (KPI) which helps in taking informed decisions. By analyzing trends and patterns in historical time-series data, we are able to provide forecasts and predictions which help companies to optimize and manage their resources better.

Data science is essential for innovation. It drives the development of technologies, such as machine learning and artificial intelligence, which are at the forefront of the fourth industrial revolution. These technologies rely on data science to learn from data, improve over time, and perform various tasks efficiently. Machine Learning focuses on developing statistical algorithms that automates analytical model building based on the data ingested. It is a subdomain of Artificial Intelligence. Developing robust data models and feed to ML algorithms for systems to learn, identify patterns and make decisions by themselves without any human interventions. In this digital era, volume of data generated is humongous and having a robust system to process and train on these data for automating decision making for various tasks helps the business grow in right direction.

Currently, I'm working as a Solution Engineer at dDriven Analytics, Bengaluru. Here, I'm part of team which handles data engineering and analytics of projects. As a solution engineer, I do R&D, develop, and implement proof of concepts for customer project requirements. Build data pipelines to perform ETL operations on relational data to generate time-series data from IT/OT platforms.

Further, build dashboards & visualizations in Power BI & XHQ. I believe, I still have to learn a lot about the data science and data analytics field and have a long way to go before I can achieve my goals.

I completely believe that this master's programme in Data Science will help me achieve my dreams. This course will help to train in Data Science. This, in turn, will help me to achieve my goal to become a successful Data Scientist who can serve to his maximum capacity at a science or an academic organization for the betterment of the world. My extents of interest are focused on Data Science. I want to study this subject profoundly in my master's degree offered at your esteemed university. I believe that given the chance I will be able to excel in the program at your university and be an asset to the department. I assure you that I will work above and beyond the call of duty to prove my worth.