ML Pathway

Problem to Solve	How to fix or change X?
Question to Answer	How does a change in X affect Y?
Data Product	Mobile Apps, Services, Websites, etc...
Data Analysis	Reports, Visualizations, Communications, etc...

Real World

Start →

Collect & Store Data

Raw Data ↔ **Process & Store Data**

Physical Sensors, Surveys, Simulations, Experiments, Data Usage, etc...

SQL Database, CSV files, Excel, Cloud Storage

1 Data Engineering →

Clean & Organize Data ↔ **Exploratory Data Analysis**

Reorganize Data, Dealing with Missing Data, Restructure Data, etc...

Statistical Analysis, Visualizations

Report

Visualization

Communication

Data Analysis

Make Decisions
Answer Key Questions

2 Data Analysis →
(Data Analyst / Data Scientist)

Machine Learning Models

Supervised Learning:
Predict an Outcome
Unsupervised Learning:
Discover Patterns in Data

Service
Dashboard
Application

Data Product

Predict Future Outcomes
Gain Insight on Data

Real World

End →

3 Machine Learning →
(Machine Learning Engineer)