# Data-Science-Workflow

*The Stackfuel Way*

| Preparation | Research | Define Metric | Gather Data | | |
|---|---|---|---|---|---|
| EDA | Understand your Data | (Rename Columns) | Detect Outliers | Check Correlations | |
| Split | Train-Test-Split | Train-Validation-Split | | | |
| Data-Preparation | Data Cleaning: Datatype Transformation | Data Cleaning: Data Imputation | Data Cleaning: Deal with Outliers | | |
| | Over/ Undersample | | | | |
| Modeling | Build a simple Baselinemodel | | | | |
| | Feature Level: Feature Engineering | Feature Level: Polynomials & Interactions | Feature Level: Data Scaling | Feature Level: Dimensionality Reduction | Feature Level: Feature Selection |
| | Algorithm Level: Train Model | Algorithm Level: Evaluate Metrics | Algorithm Level: Hyperparameter Tuning | | |
| | Model Selection | | | | |
| Model Interpretation | Model Interpretation | Sanity Checks | Visualize Feature Importances & Predictions | | |
| Storytelling | Visualize most important findings | Prepare a Presentation | Present your Findings | | |
| Clean Up | Create Functions | Refractor Code | Documentation | Send Model to Deployment | |