Project Based Learner Series

Fitting Machine Learning Models: The Basics

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Project Based Learner Series

Meet the Instructors

Cristina Anton

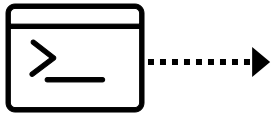
Rachel McLawhon

Jackie Johnson

Tom Grant

SAS Applications for Machine Learning

Programming Approach



Visual Drag-and-Drop Approach

Optional Course Notes for Later Study

Available on Learn.sas.com page

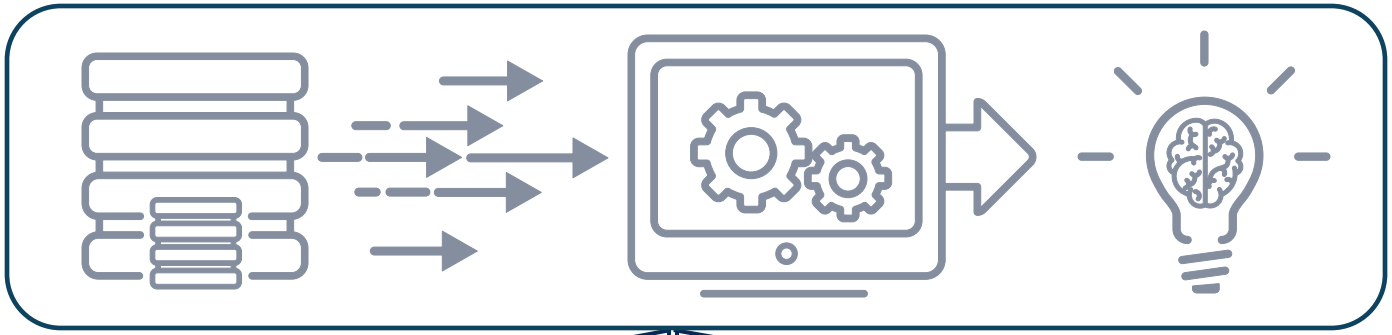
- SAS Skill Builder for Students Learning Path
  - Statistical Analysis, Predictive Modeling, and Machine Learning in SAS Viya
- Machine Learning Using SAS Visual Analytics
  - Course: SAS Visual Statistics in SAS Viya: Interactive Model Building
  - Course: SAS Visual Data Mining and Machine Learning
- Machine Learning Using SAS Model Studio
  - Course: Machine Learning Using SAS Viya
- Machine Learning Using SAS Studio
  - Course: Supervised Machine Learning Procedures Using SAS Viya in SAS Studio

Suggested Example Datasets

Used in Optional Course Notes

- Machine Learning Using SAS Visual Analytics
  - Course: SAS Visual Statistics in SAS Viya: Interactive Model Building - VS_BANK
  - Course: SAS Visual Data Mining and Machine Learning - VS_BANK_PART
- Machine Learning Using SAS Model Studio
  - Course: Machine Learning Using SAS Viya - COMMSDATA
- Machine Learning Using SAS Studio
  - Course: Supervised Machine Learning Procedures Using SAS Viya in SAS Studio - DEVELOP

Machine Learning



Automate

Provide automation to the model-building process by minimizing human intervention.

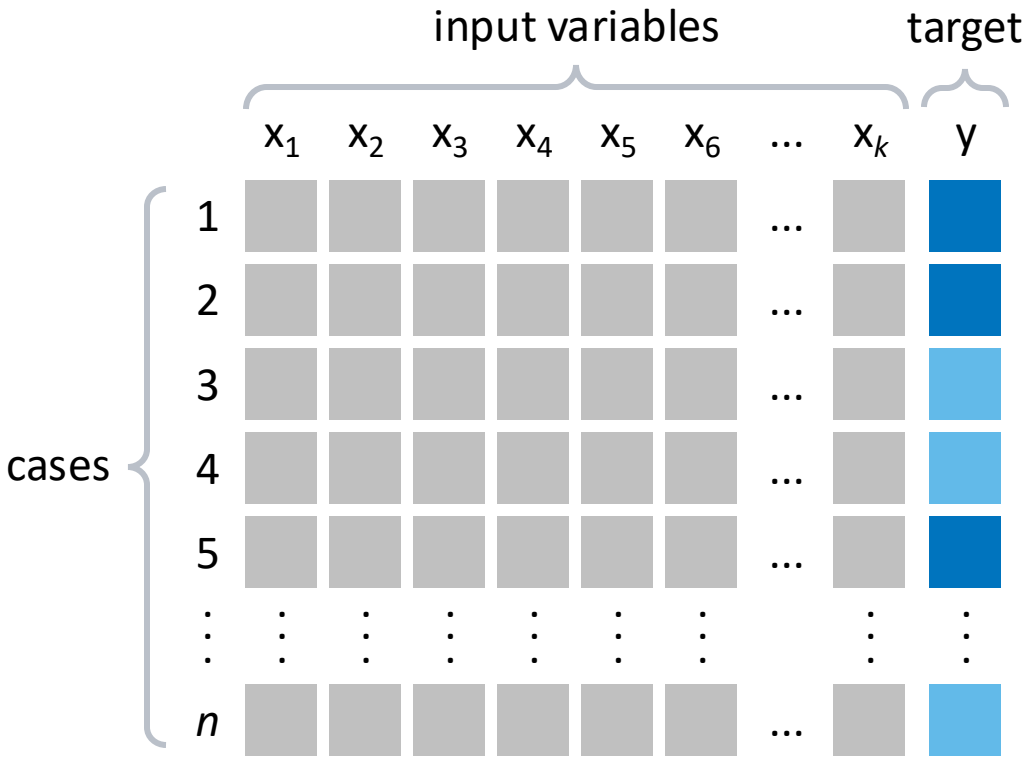
Customize

Build powerful models using state-of-the-art algorithms from SAS in conjunction with open source tools.

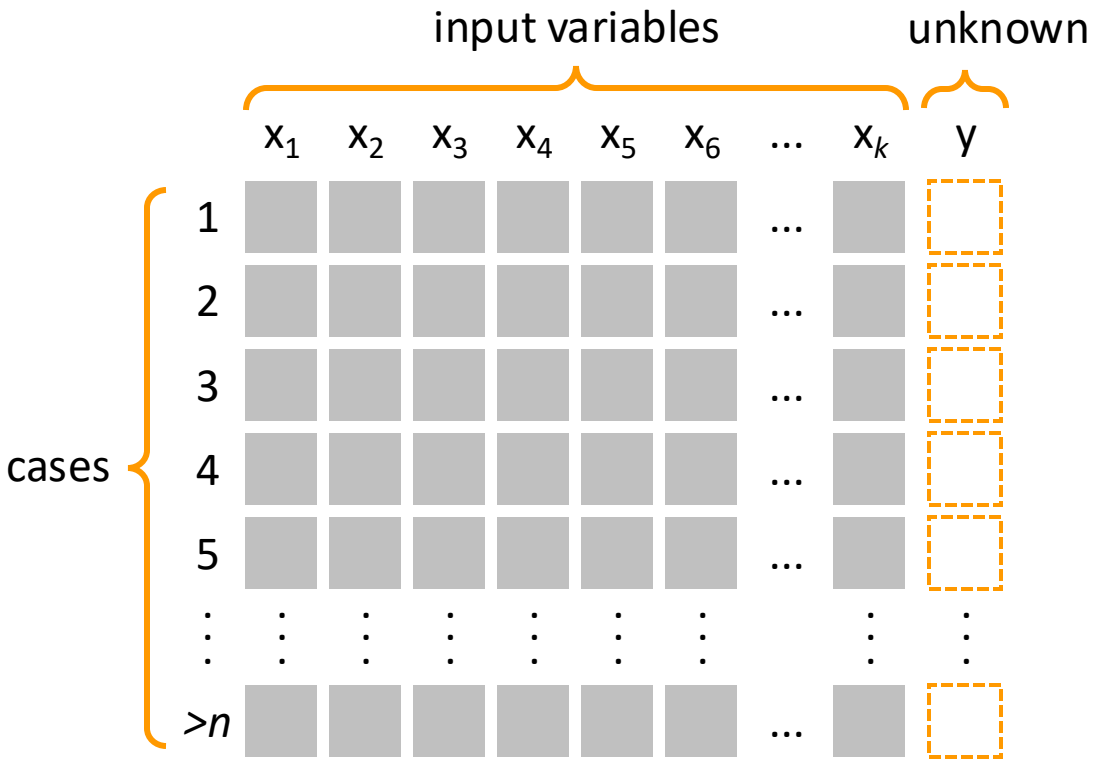
Accelerate

Fast response time for sophisticated analytics applied to data of any size or complexity.

Supervised Machine Learning Models



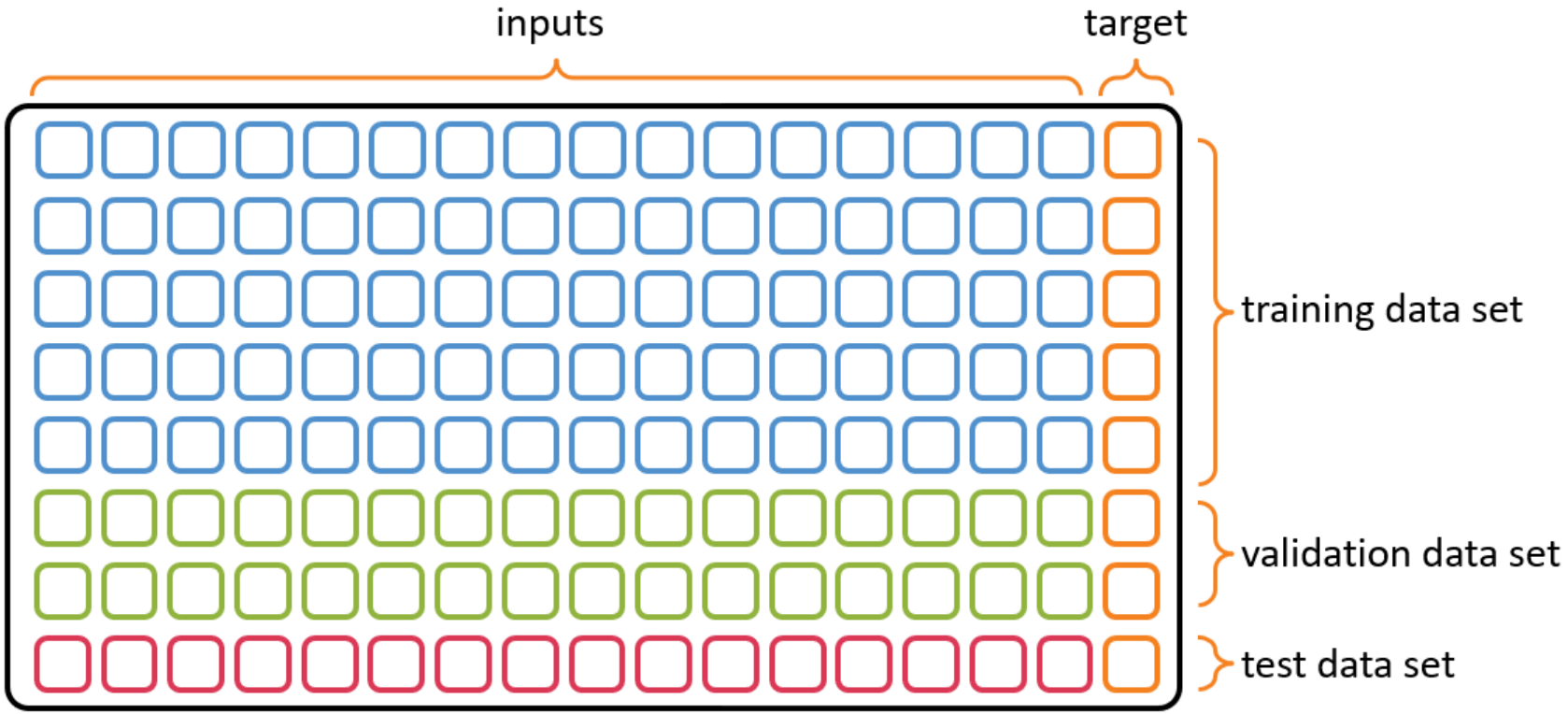
Generalization



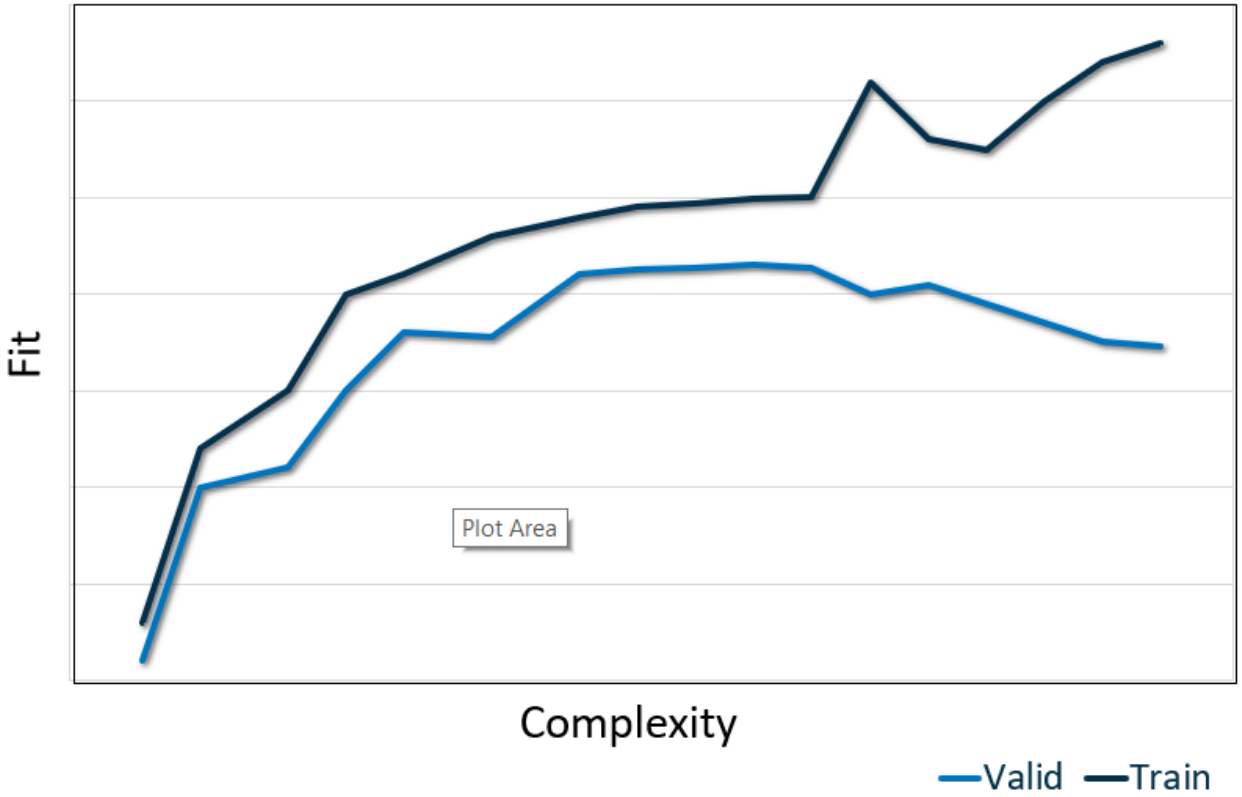
Supervised Machine Learning Models

Models	Target	
	Continuous	Discrete
OLS Regression	✓	
Logistic Regression		✓
Decision Trees	✓	✓
Neural Networks	✓	✓
Support Vector Machines	✓	✓
Factorization Machines	✓	✓
Ensemble Models	✓	✓
Two-Stage Models	✓	✓

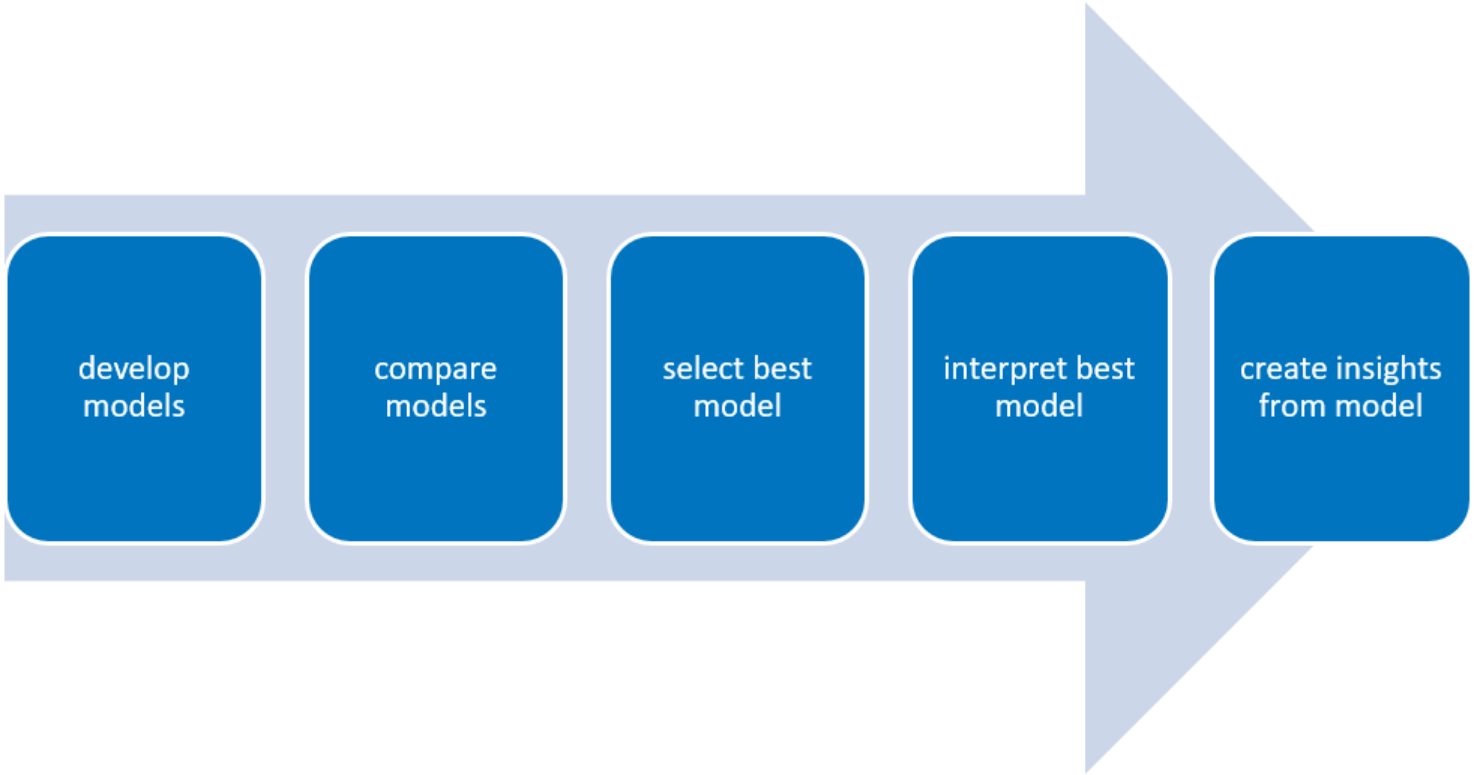
Honest Assessment and Partitioning



Fit Versus Complexity

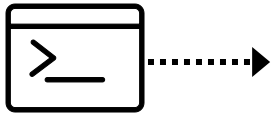


Multiple Supervised Models



SAS Applications for Machine Learning

Programming Approach



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Demonstration

SAS Viya Software Tour with iLink Mortgage, Inc.