# Inspire Finance Students of Machine Learning

## *-The visual way*

Cinder (Xinde) Zhang
University of Arkansas

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# The Demand

- CNBC 2019
  - "***Finance jobs requiring A.I. skills increased 60% last year"***
- CFI list Machine Learning as one of the top 6 Skills in Finance

# The Challenge

- Finance Students
  - Little or no coding experience
  - Uncomfortable with data and modeling
  - And more…
- Educators
  - Lack of effective and intuitive tool for teaching the subject

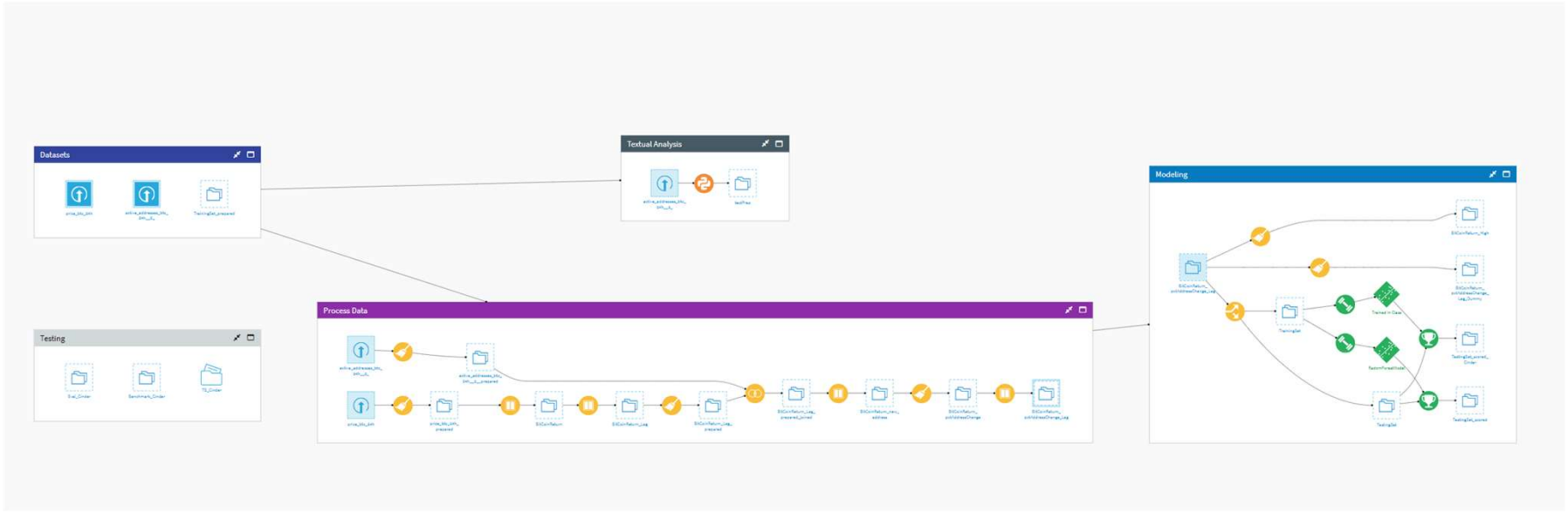
# Visual Approach

- Process
  - Define a meaningful business research question
  - Research data availability
  - Design the process
    - Data collection/processing
    - Feature generation
    - Build machine learning model(s)
    - Model testing
    - Refine the model and/or question
- The Tool
  - Dataiku
  - Assemble the process visually
  - With the steps as visual blocks

# Example

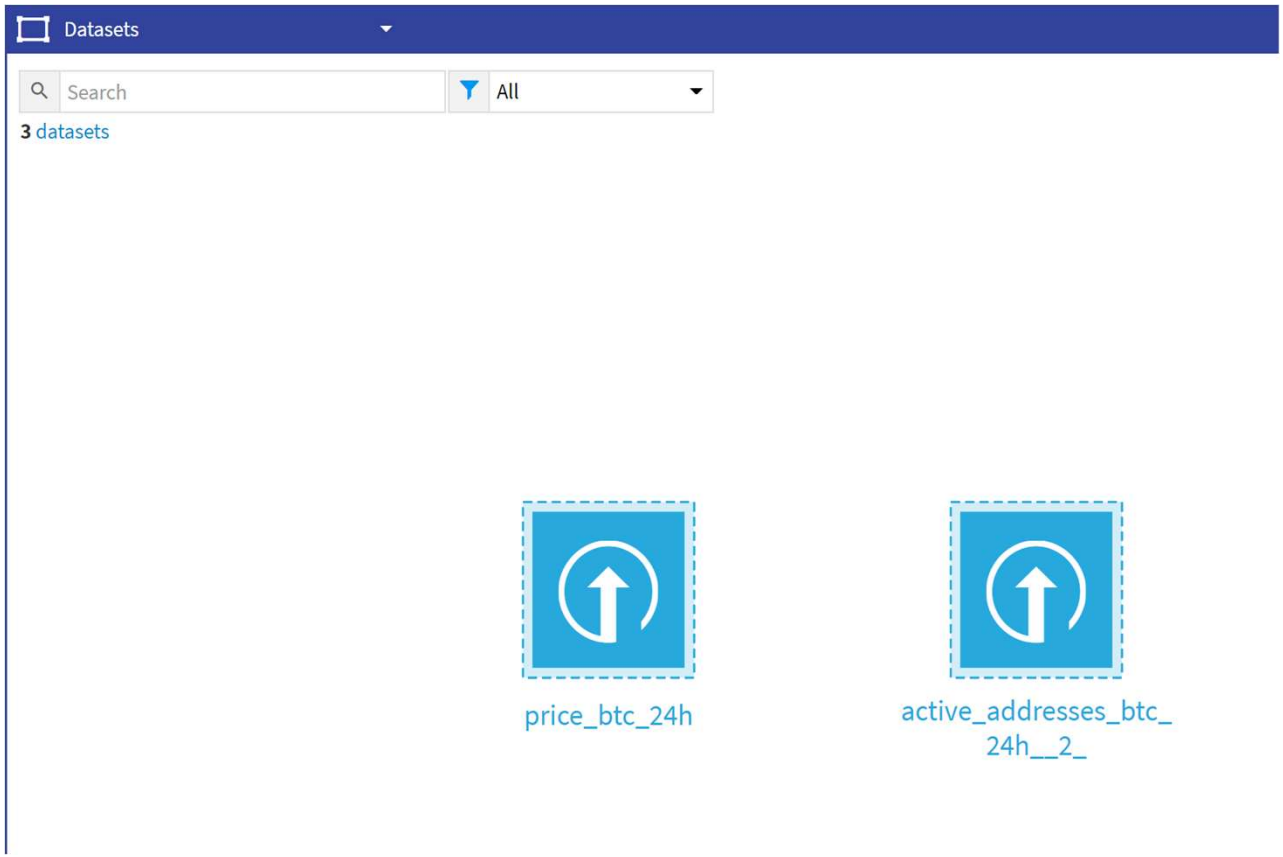
- The Question: Can we identify factors which may predict Bitcoin (BTC) daily return?
  - First guess
    - Active address of BTC?
  - Data and resources
    - https://github.com/CinderZhang/FinML/blob/main/ML%20Resource.ipynb
    - Metric Catalog - Glassnode Studio - On-Chain Market Intelligence

# Overview



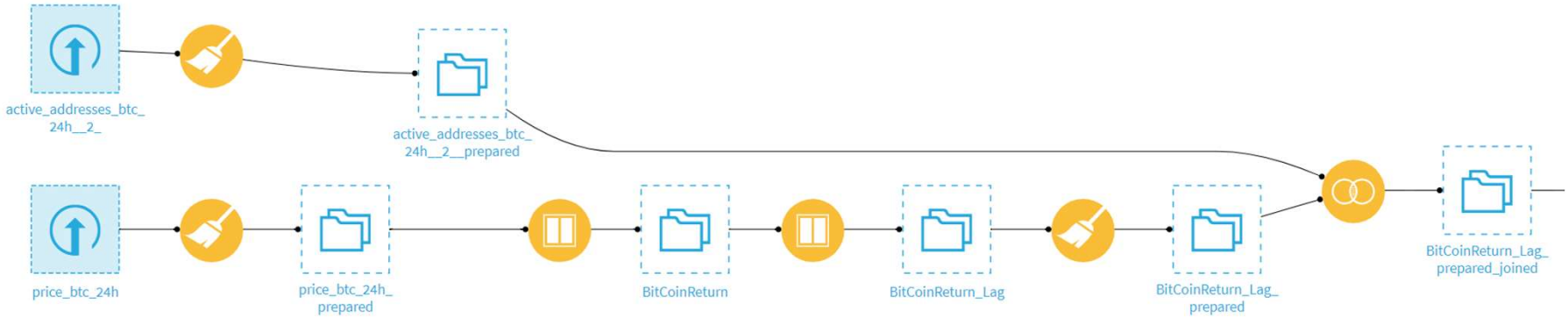
# Building Blocks

## 1: Datasets



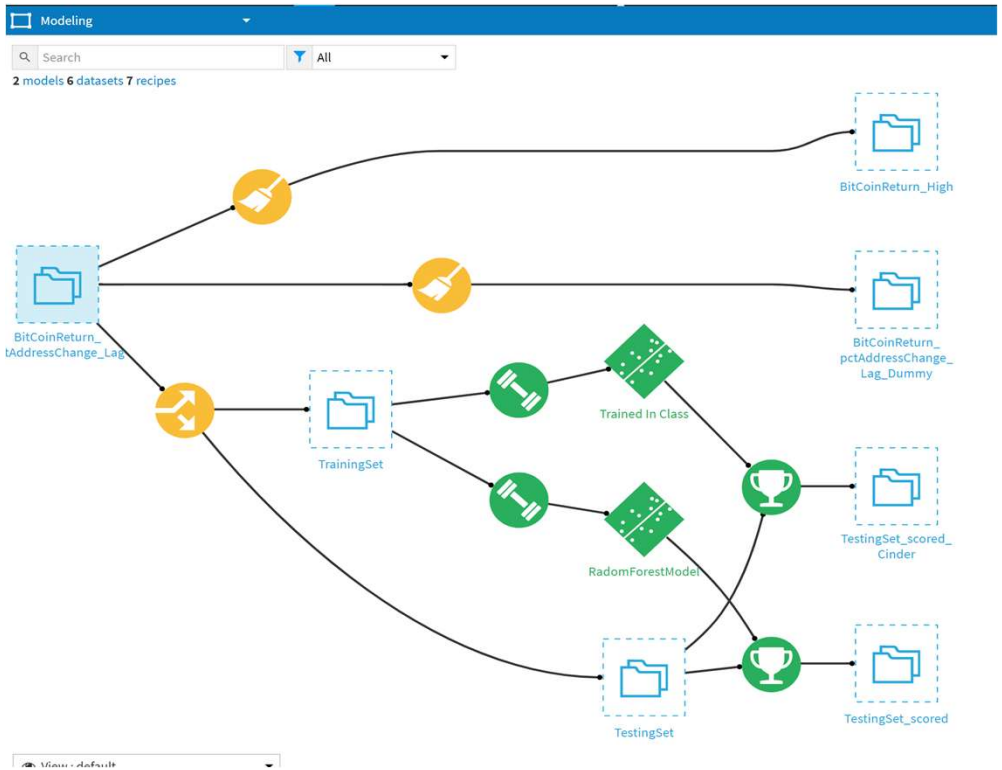
# Building Block 2

## 2: Data Processing

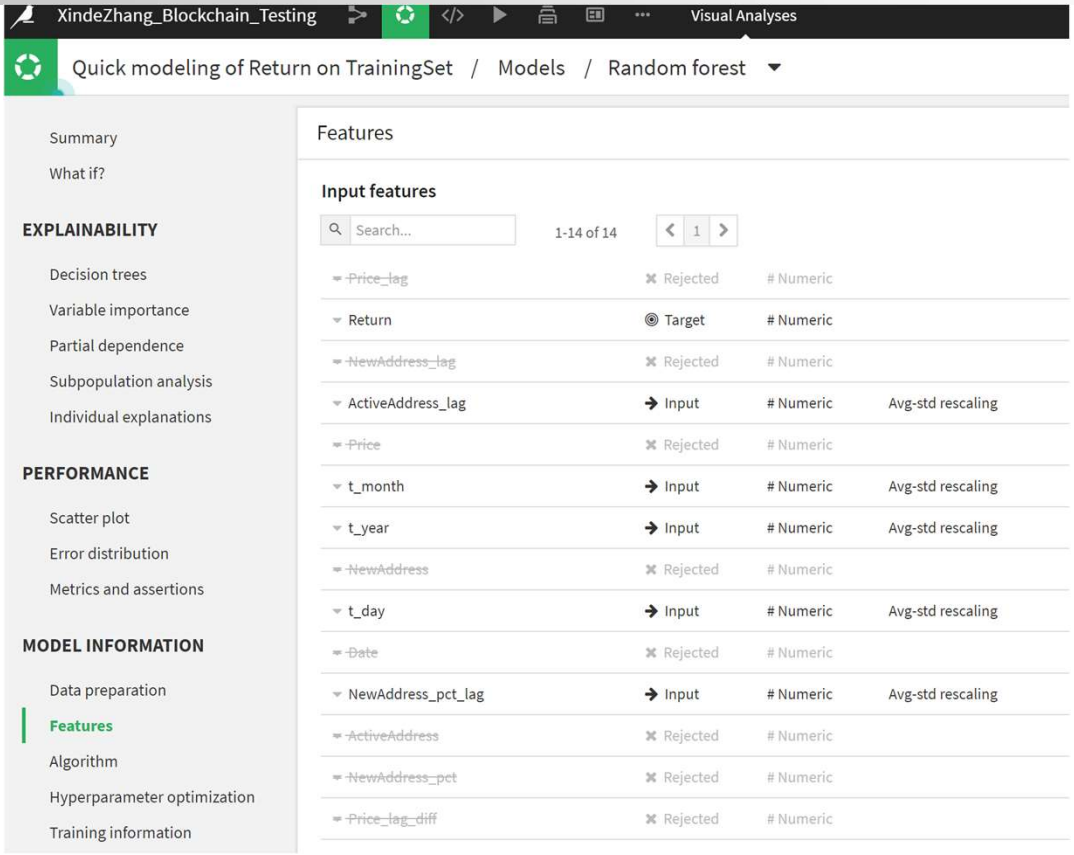


# Building Block 3

## 3: Modeling and Testing



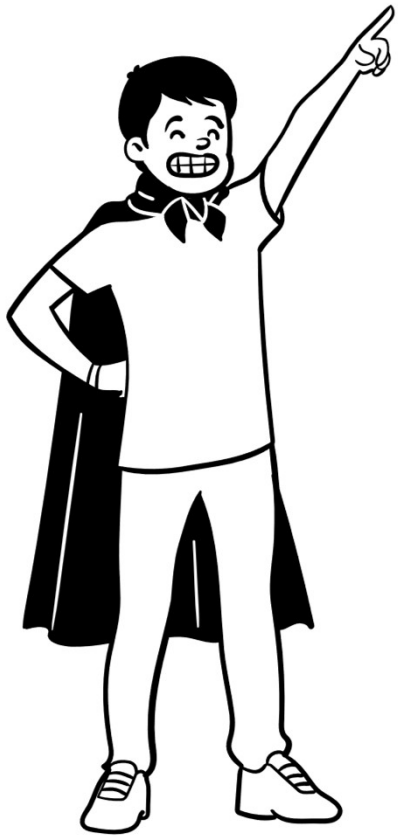
# Close Look of the Model(s)



# Future Work for Students

- More data
- More possible factors
- Refine the Question

# Ah!



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# Thank you