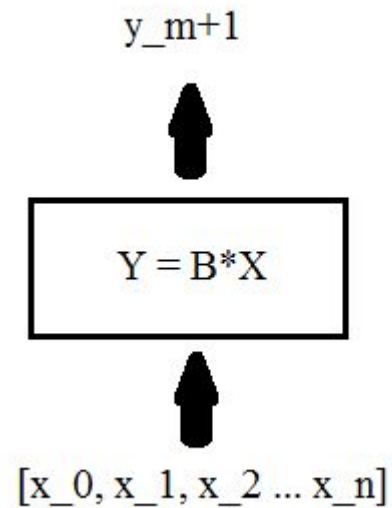
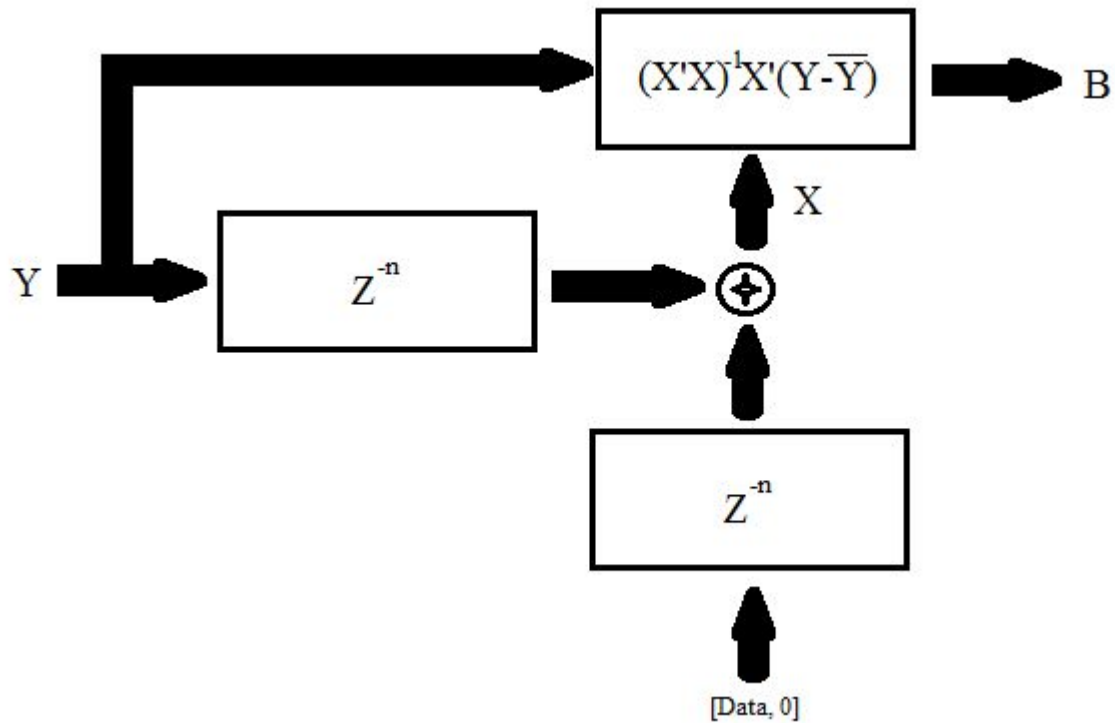


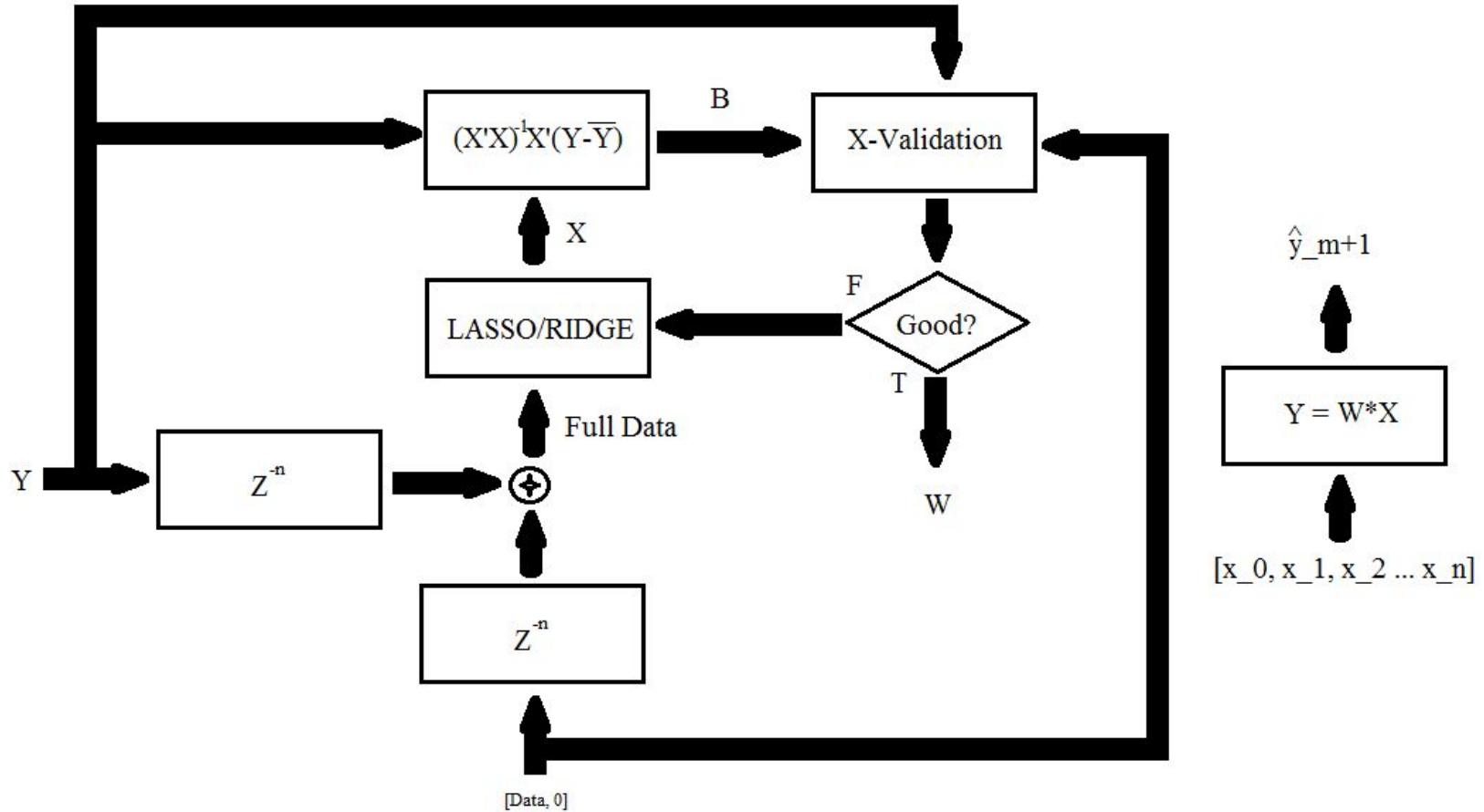
# FORECASTING TEAM

**Jeremy Garcia**  
**Travis Tanaka**  
**Makiko Kuwahara**  
**Keoni Davey**

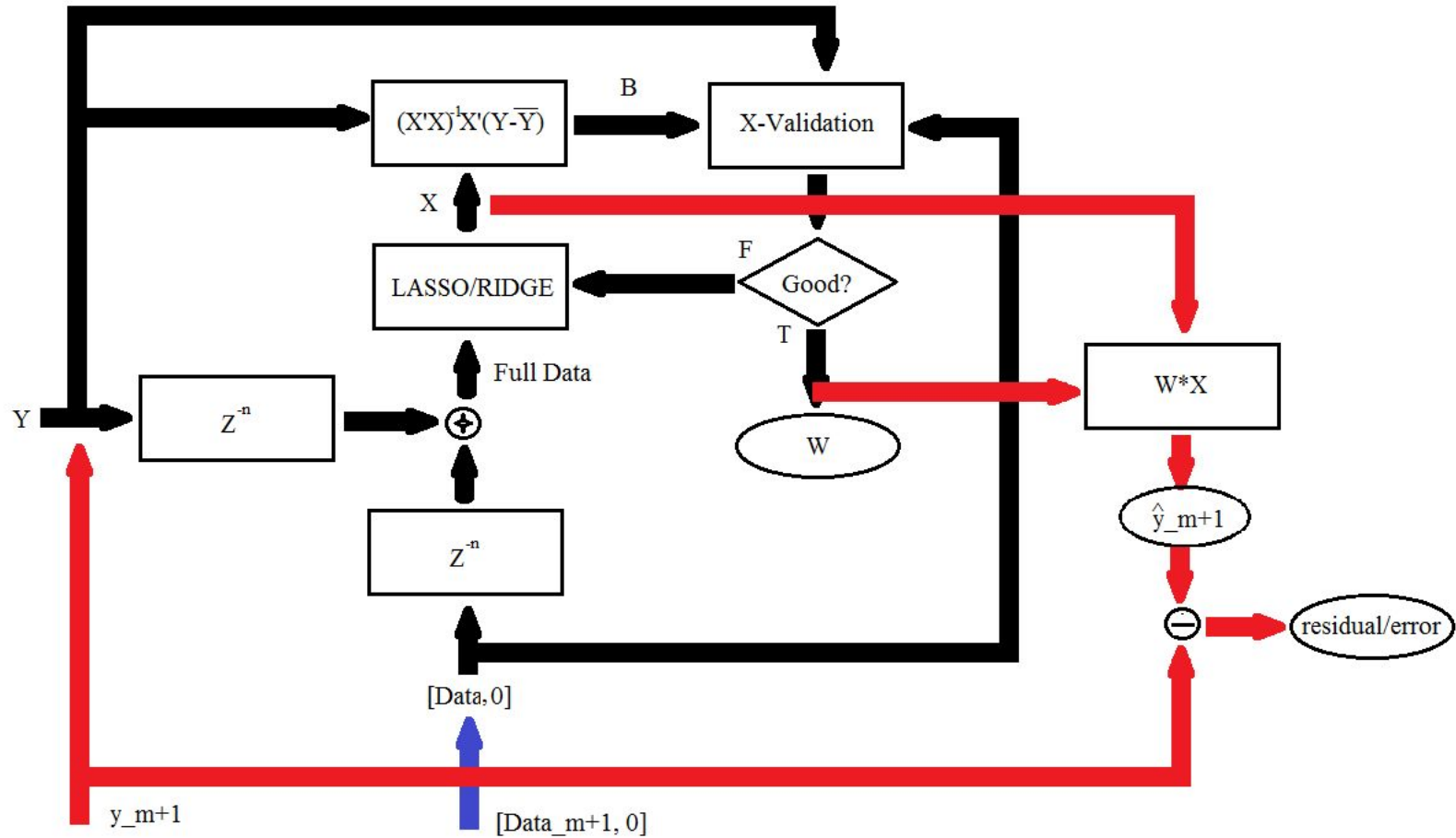
# BLOCK DIAGRAM



# BLOCK DIAGRAM



# BLOCK DIAGRAM



# PROGRESS

- The team has been learning iPython
- X weeks of tutorials.
- Went over the the proof of linear regression
- Currently grabbing data

```
#Load Libraries  
from __future__ import division  
import numpy as np  
import scipy as sp  
import matplotlib.pyplot as plt  
import seaborn as sns  
import pandas as pd  
from IPython.html.widgets import interact, fixed  
%matplotlib inline
```

```
#Load Linear Regression Library  
from sklearn.linear_model import LinearRegression
```

```
#Load data from UCI's Machine Learning Repository  
url = 'http://archive.ics.uci.edu/ml/machine-learning-  
databases/concrete/compressive/Concrete_Data.xls'  
concrete = pd.read_excel(url)
```

```
#Make the X array  
x = [concrete[concrete.columns[1]], concrete[concrete.columns[2]],  
concrete[concrete.columns[3]], concrete[concrete.columns[4]],  
concrete[concrete.columns[5]], concrete[concrete.columns[6]],  
concrete[concrete.columns[7]]]  
X = np.transpose(x)
```

```
#Make the Y array  
Y = concrete[concrete.columns[8]]
```

```
#Initiate our linear regression object  
model = LinearRegression(normalize = True)
```

```
#Load the X and Y array into the linear regression object  
model.fit(X,Y)
```

```
#Print the coefficient and intercept  
print "The coefficient are", model.coef_
```

```
#Print the intercept
```

# FUTURE IDEAS/ THINGS TO BE DONE

- Learning more iPython!
  - Fitting the current data
  - Lasso/Ridging the data
  - Going over the math proof for above
  - Calculate for the unbiased variance
- 
- Fully autonomous version?



# PROBLEMS SO FAR

- Time meeting conflictions
- Midterms and other stuff

Slow and steady :D





QUESTIONS?!

