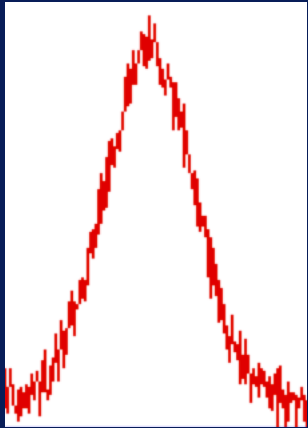


Feature Transformation

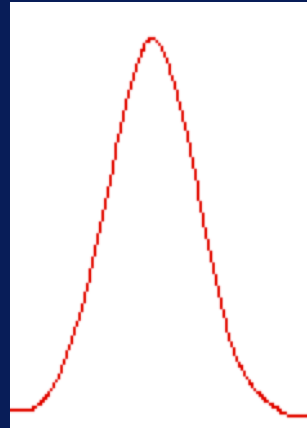
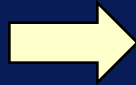
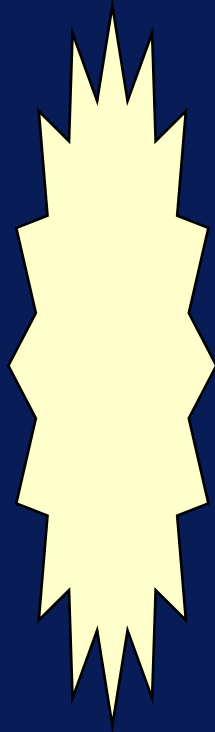
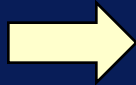
After this video you will be able to..

- Articulate the purpose of feature transformation
- List three feature transformation operations
- Discuss when scaling is important

Feature Transformation



**Original
Data**



**Transformed
Data**

Scaling

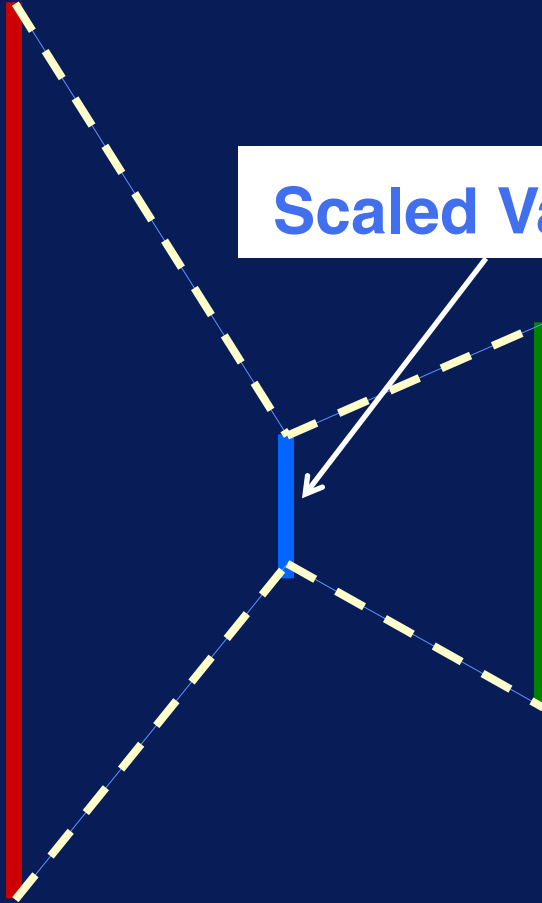


Weight

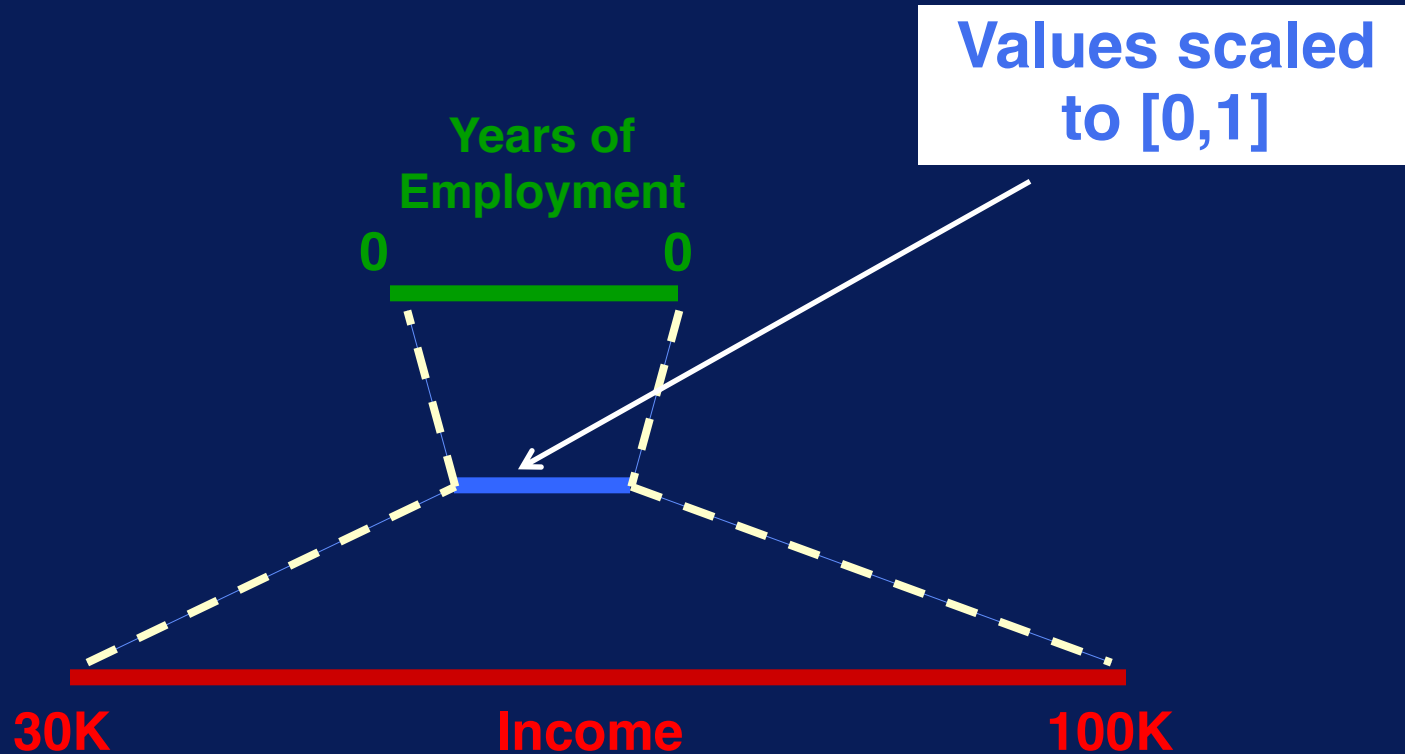
Scaled Values



Height



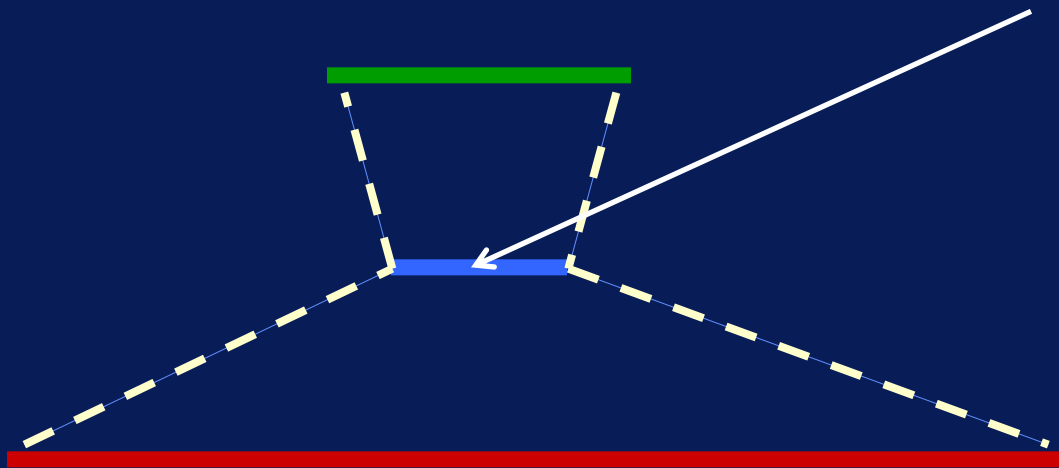
Scaling to a Range



Zero-Normalization / Standardization

Mean = 0

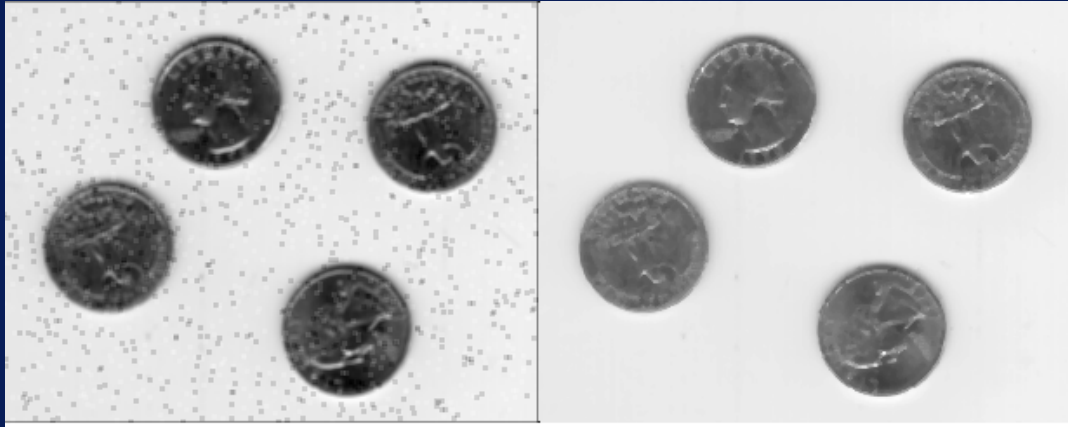
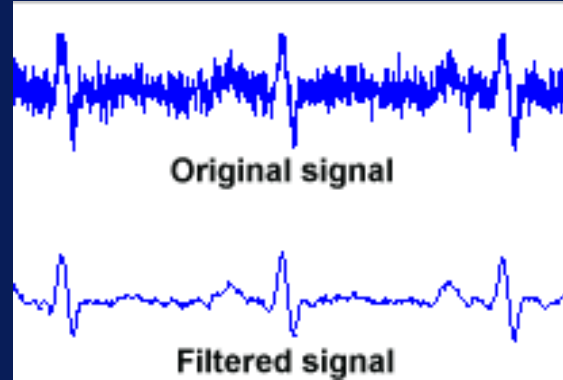
Standard Deviation = 1



Filtering

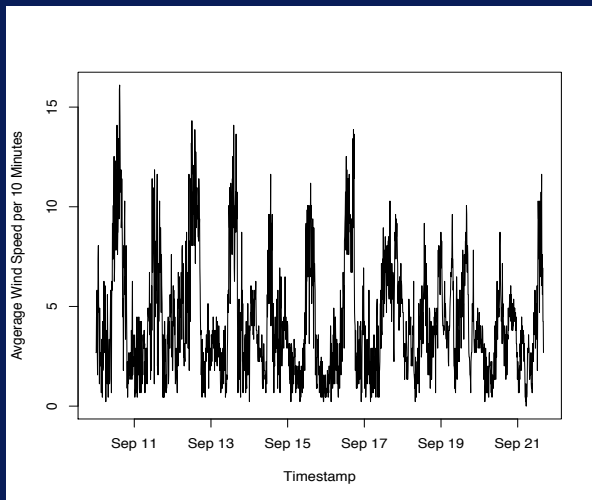
Filter noise from audio signal

Remove grainy
appearance in images

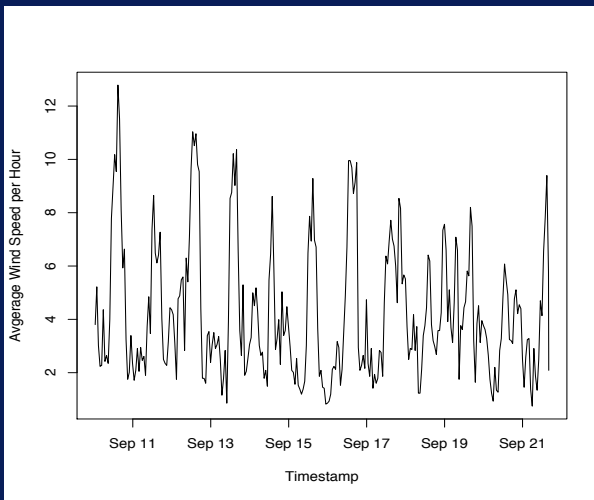


Aggregation

Avg Wind Speed
(every 10 minutes)



Avg Wind Speed
(every 60 minutes)



Feature Transformation

- **What:** Map feature values to new set of values
- **Why:** Have data in format suitable for analysis
- **Caveat:** Take care not to filter out important characteristics of data