

# HUDK 4051: LEARNING ANALYTICS: PROCESS & THEORY

3/23/17 12:09 PM

# In the news



**SNHU, Rethink Education to Invest \$15 Million in Seed Stage EdTech Startups** rethinkeducation



Internet of Things Promises Smart Future for Campus Infrastructure



Utilities, building management and transportation fleets can reap benefits of connected systems.

The 2 edtech fields with the most potential under Trump

**MINNPOST**

Minnesota is really good at collecting student data, but not the best at using it

A British Teenager Has Corrected a Mistake in NASA's Data

Kids these days...



Accreditors Must Prioritize Student Outcomes in Measuring College Quality

Center for American Progress



POSTBULLETIN

American Indian committee makes teacher training, curriculum requests

Placement rates, other data colleges provide consumers are often alternative facts

THE HECHINGER REPORT



#DukeMBBStats

# Soundcloud Update

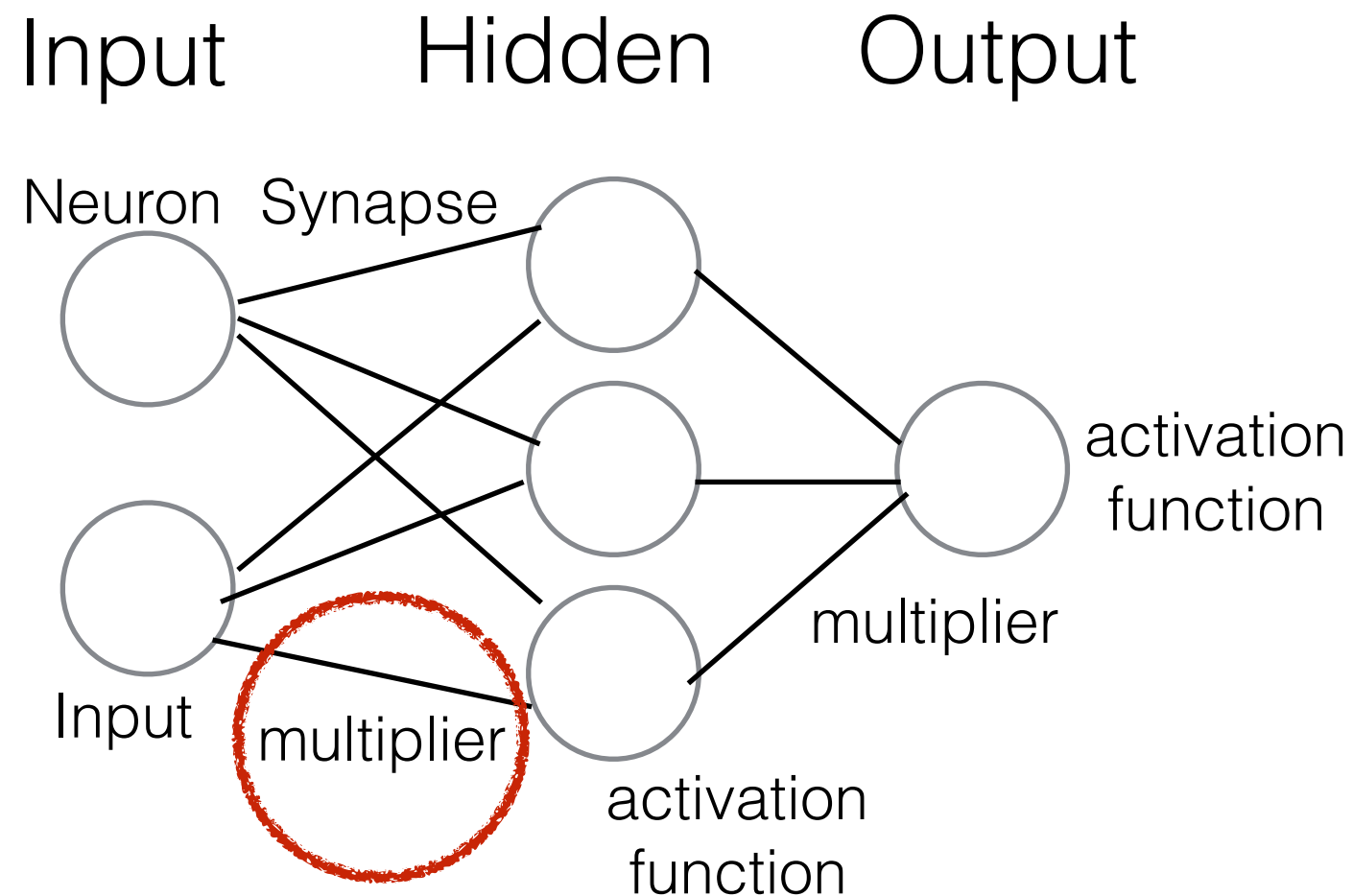
# Midterm Update

# Neural Networks

# Three Ideas

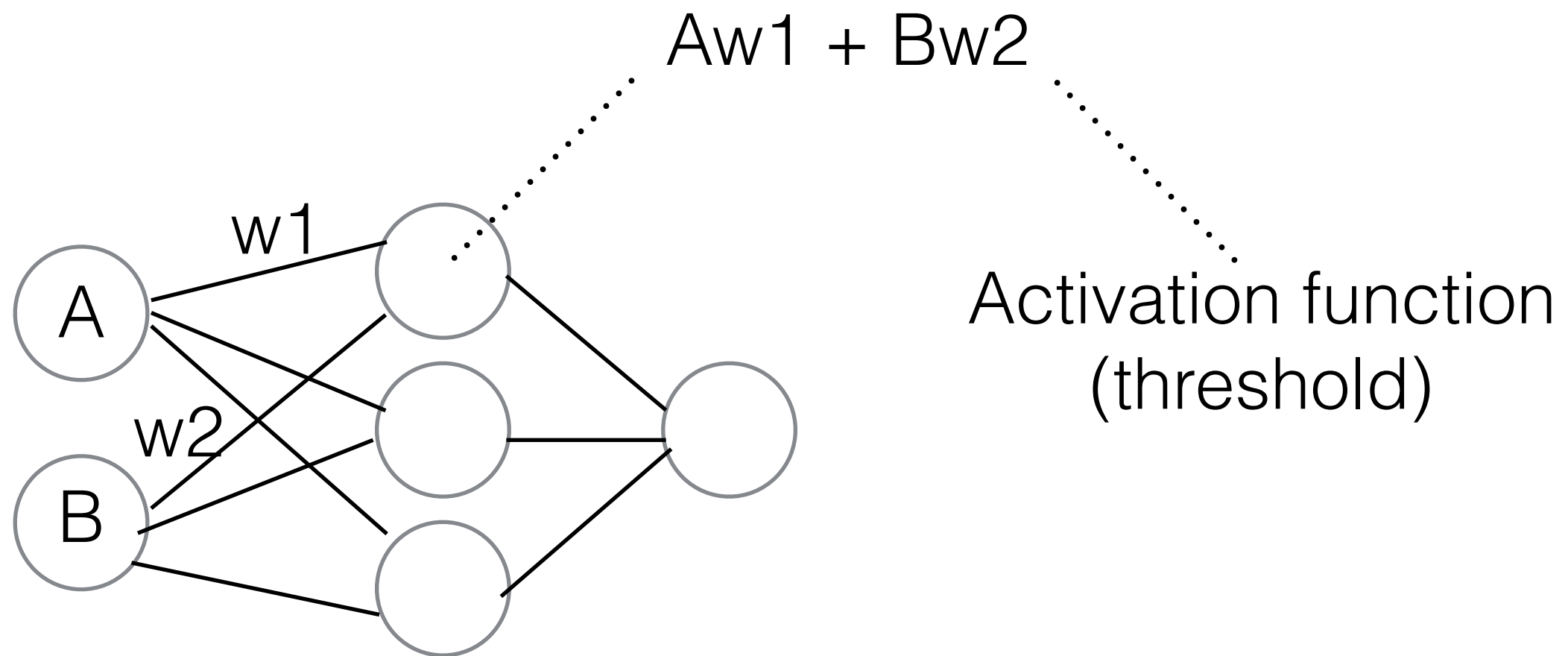
- Structure
- Forward Propagation
- Back Propagation

# Structure



- based on biological neurons

# Forward Propagation



- Computation of weights



# Back Propagation

- Error calculation and cost function - gradient descent
- Gradient descent for each synapse is calculated
- And each synapse is individually re-calculated
- Try again